

Exploring Design Options for Modern Streetcar along West 7th Street



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Building Community-University Partnerships for Resilience

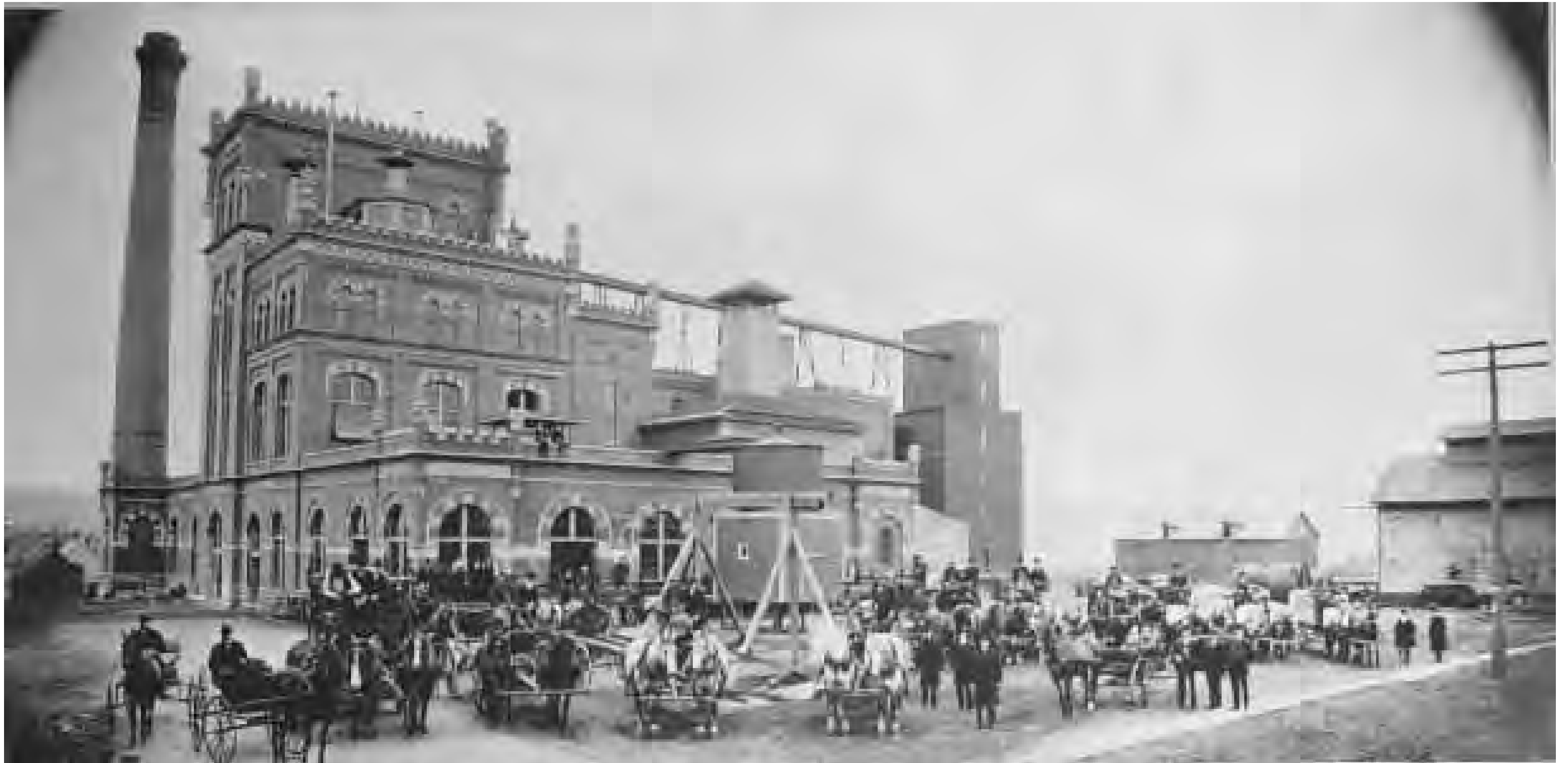
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Table of Contents

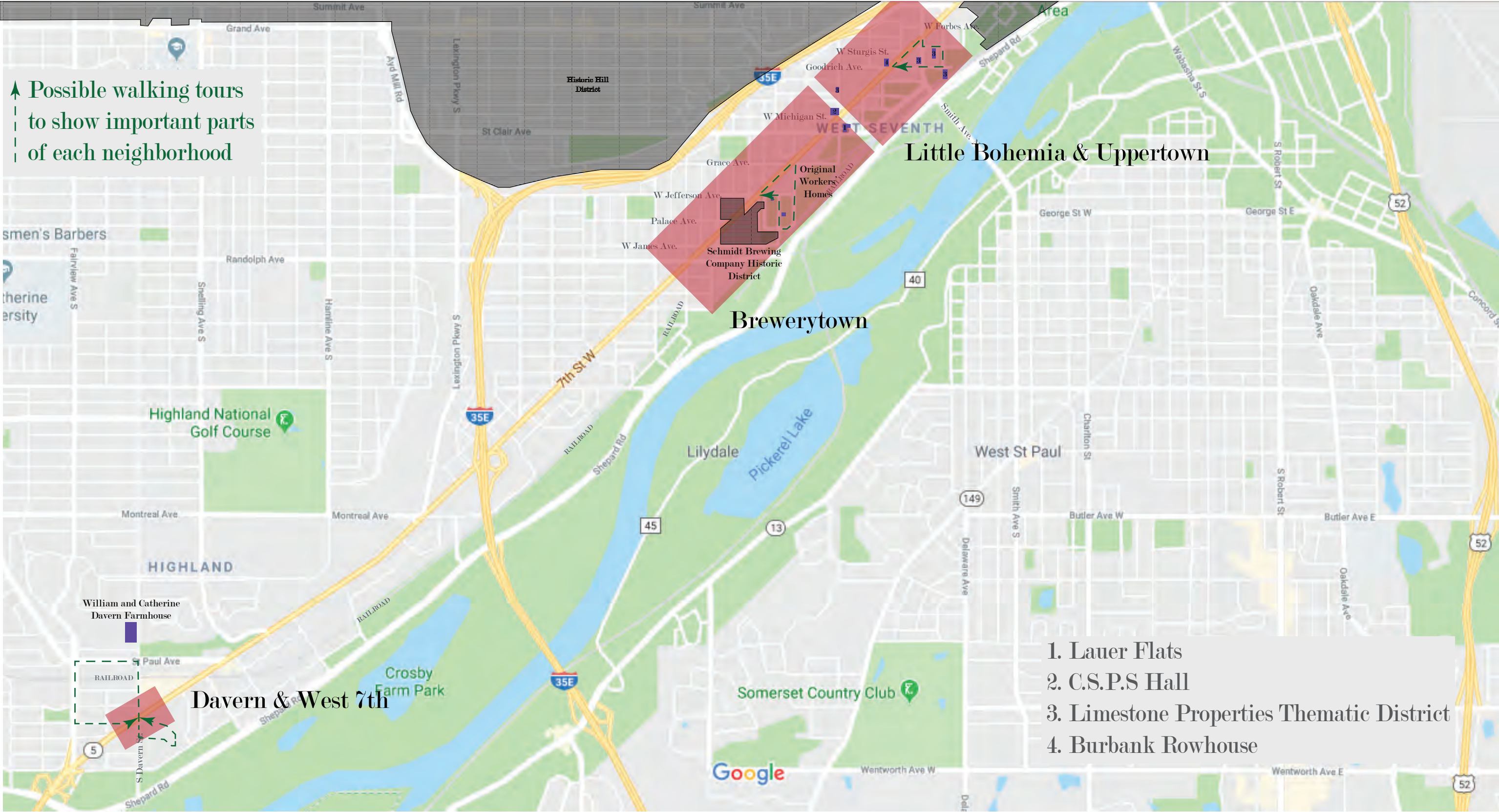
West 7th’s Historical and Cultural Design	5
<i>By Ben Fink</i>	
Davern and West 7th	13
<i>By Jack Condon, Jonathan Delgado, Maria Noga, Anna Pate, and Abel Santos Meeker</i>	
Sibley Plaza	21
<i>By Trevor Dosch, Patrick Cipriano, Preston McMahon, Lingyu Li, and Jeff Guaman</i>	
Lexington Ave. Redevelopment Project	37
<i>By Crystal Jehly, Dan Mahoney, Eamonn Casey, Ethan Miller, Eugene Agyili, and Michael Dunst</i>	
Pedestrian Safety on West 7th	53
<i>By Yunlu Zhang</i>	
West 7th Street & Randolph Avenue	63
<i>By Brendan Broady, Leyla Dualeh, Nathan Davies, and Sophie Gallandat</i>	
St Clair Avenue/West 7th Street	77
<i>By Jacob Bonde, Dani Maas, Michael Talerico, and Sophy Fitzcollins</i>	
Grand Ave & West 7th	87
<i>By Marin Foley, Mara Hitt, and Jack Scherkenbach</i>	
The Landmark Gateway	119
<i>By Ian Albers, Ben Blackburn, David Enrrique, Alex Johnson, and Jordan Macintosh</i>	
West 7th Streetcar—Downtown St. Paul	137
<i>By Josh Lassen, Reid Johnson, Nate Sievert, Andrew Mercier, Caleb Rauh, and Zach Cierzan</i>	

West 7th's Historical and Cultural Design

Ben Fink



Through this project, I have researched the history of both the built environment, as well as the different cultures that have occupied various areas of West 7th over time. This exploration is aimed at identifying the key elements that shape each neighborhood, and how the historical and cultural contexts of West 7th could inform streetcar station designs.. From this research, I have been able to develop design elements for Davern and West 7th, stops near the Schmidt Brewery in Brewerytown, and stops in Little Bohemia and Uppertown. Below is a map showing studied areas, showing nearby historic areas and buildings.



Precedents

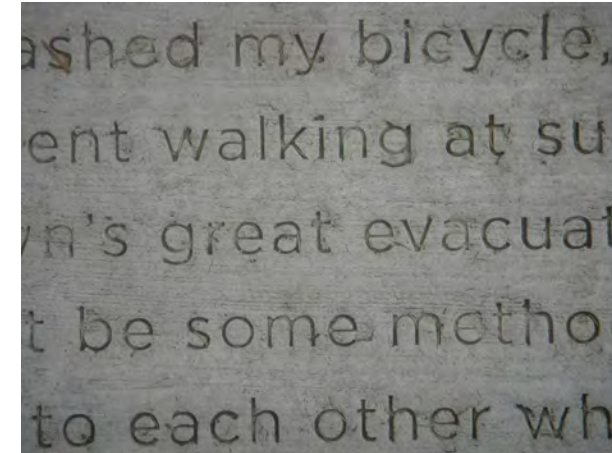
By incorporating ideas like these into the stop designs, it both personalizes the space to each location, and tells the story of who and what shaped the identities of these neighborhoods.



DALE STREET STATION - Panels with patterns from different cultures that have settled the area over time.



VICTORIA STREET STATION - Images on terracotta of the old streetcars and prominent community leaders



MARCUS YOUNG - Poems for City Sidewalks, an annual contest that allows people to submit poems in Dakota, Hmong, Somali, Spanish, or English, piggybacking off of city sidewalk repairs

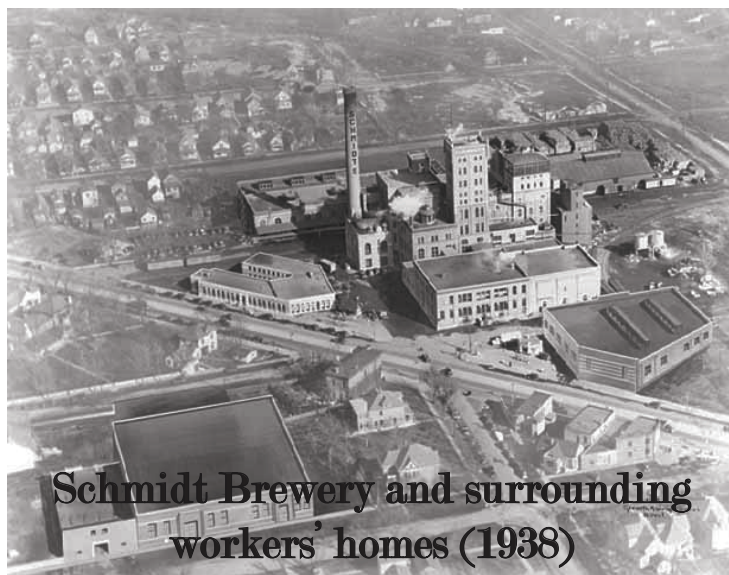


History



LITTLE BOHEMIA AND UPPERTOWN:

- Low-rise buildings, mostly 1940's and younger
- Mancini's restaurant and bar
- Home of the Lauer Flats built by Henry and Charles Lauer, 2 stonemasons active in the 1880's who helped on the Schmidt Brewery and 2 nearby Churches
- Small, untouched Victorian homes due to disinvestment over time, but no store fronts of the same era



BREWERYTOWN:

- Industrial past
- Jacob Schmidt Brewery
- Small homes and duplexes, built for brewery and industrial workers
- Starting in 1970, 1/3 of the homes in the neighborhood were transformed into group homes for people with mental health issues until 1997
- Fort Road Federation and Habitat for Humanity bought, rehabilitated and rebuilt many of the run down homes



DAVERN AND WEST 7TH:

- Less architecturally rich
- Less unified architectural style or era
- Last major intersection before Fort

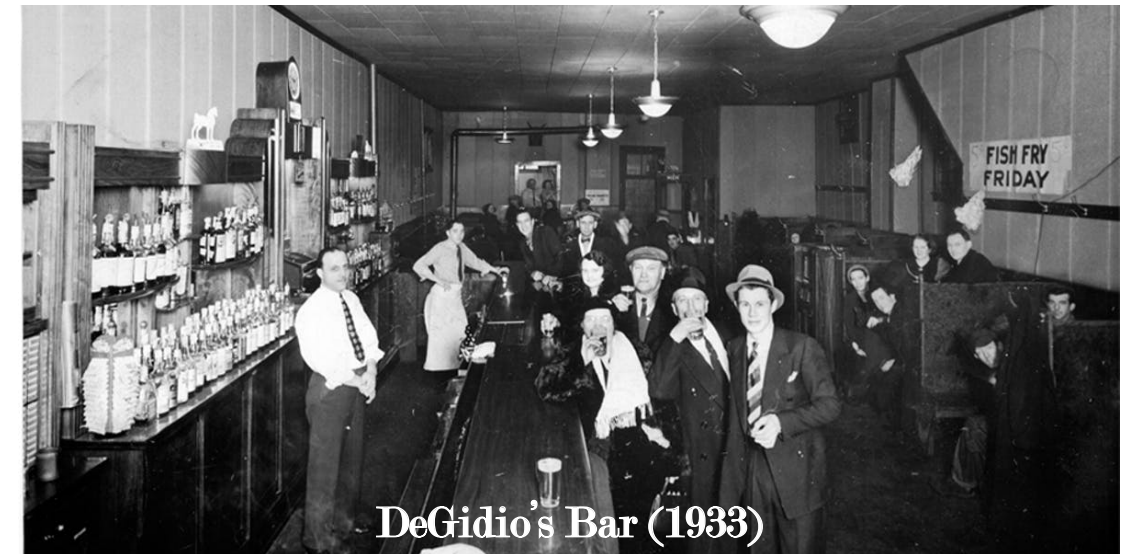


Culture



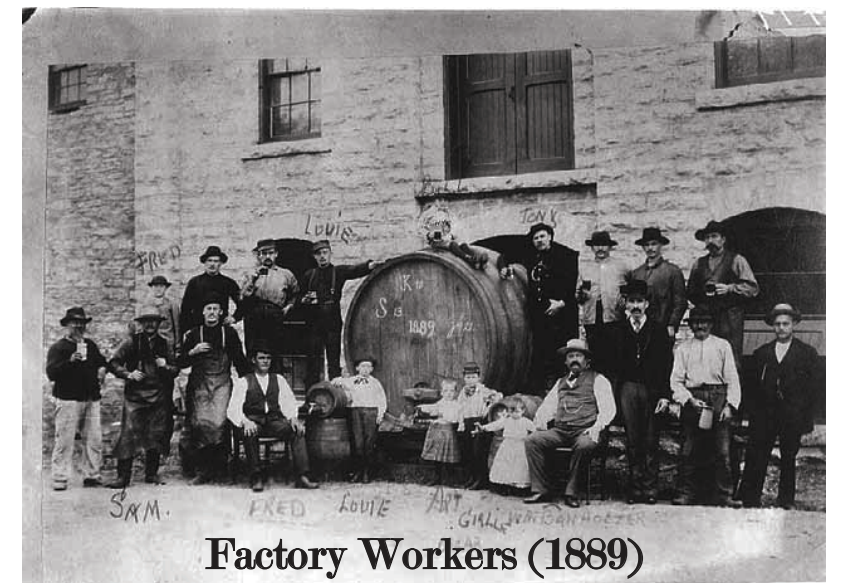
LITTLE BOHEMIA AND UPPERTOWN:

- History of Polish and Italian immigrants, largely shaping the neighborhood
- Mancini's Char House and DeGidio's, examples of businesses opened by Italian immigrants
- Currently home to a large Mexican Population



BREWERYTOWN:

- Schmidt Brewery and Bad weather Brewing Company
- First wave of immigrants came from Germany, as well as Italians a few decades later
- Working class neighborhood for most of its history
- Artist lofts
- Group homes for people with mental illnesses largely shaping neighborhood



DAVERN AND WEST 7TH:

- Somali, Ethiopian, and Jewish populations in the area
- Ethiopian Restaurant and Lounge
- Saint Paul Jewish Community Center
- Last major intersection before the Mississippi River and the MSP Airport, so visitors traveling to downtown will first see this intersection
- Cultural, not architectural elements shaping the environment



LITTLE BOHEMIA & UPPERTOWN:



Traditional Polish Pattern

Mexican Folk Art Pattern



Well known symbolism to further represent people who live there



Cobblestone and other stonework, referencing the work of the Lauer brothers that can be seen in the area



Stained concrete as a way of displaying these patterns, which can be applied across station stops in the same way Poems for City Sidewalks are

BREWERYTOWN:



Classic Mediterranean Pattern

German Textile Pattern



Red brick with sandstone caps, to reference the Schmidt Brewery and other lost industrial buildings



Concrete and corrugated metal for industrial design



Made to represent mental illness, this type of art could reference the neighborhood's group home past in a design

DAVERN AND WEST 7TH:



Textile Artifacts displaying patterns from Somalia



Use of sandstone for a connection to nearby river bluffs and Fort Snelling



Native plantings to reference the plant life and Native Americans that once occupied this area

This project was meant to analyze the history of West 7th, focused on identifying the main characteristics of each ‘microneighborhood’, and extracting certain material choices from them to inform future stop designs in each area. Since this research was meant to instruct which station design elements should be included it was important to try not to skip over any important pieces. Cultural, social, and economic histories were researched, in addition to the general history of the built environments of each area and how these have changed over time. Certain areas of West 7th, like the Grand Avenue intersection for example, already had a very defined identity with buildings of a similar style or era of construction. Because of this, areas like Davern and West 7th, Brewerytown, Little Bohemia, and Uppertown were more in need of this identity. Despite their lack of obvious visual identity, the research conducted on these areas revealed a just as interesting, but less often told history. Areas like Brewerytown that are seemingly only shaped by the Schmidt Brewery were found to have so much more that could be used as material for station designs. It is my hope that this project has been helpful in exposing some of the lesser known history of each area, and that these histories can eventually be represented in streetcar station designs along West 7th.



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Davern and West 7th



Jack Condon, Jonathan Delgado, Maria Noga, Anna Pate,
and Abel Santos Meeker

Table of Contents:

Intro: 15

Urban Farm: 16

Ecological Systems: 17

Circulation: 19

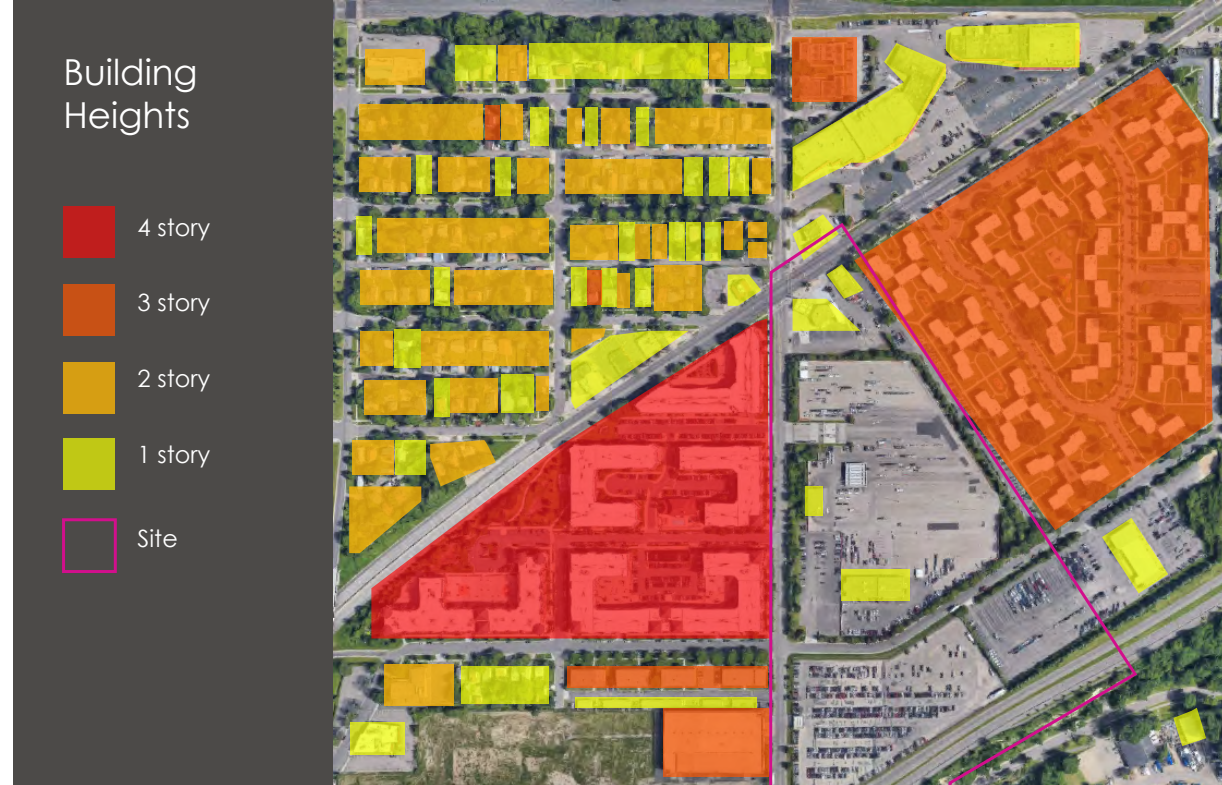
Community Center
and Outdoor Plaza: 16

Outdoor Recreation: 18

River Structure: 19–20



Introduction:



Building Heights



Parking Lots vs. Green Space

Existing Conditions

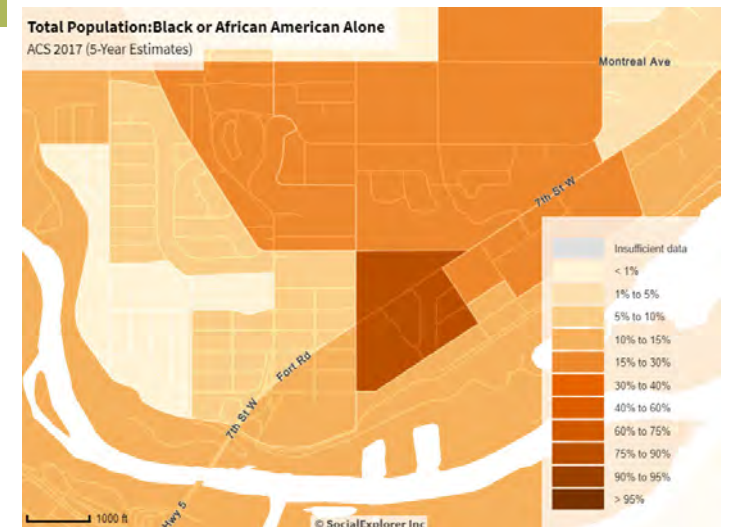
Positive Aspects

- Vibrant existing community with diverse culture and mixed income
- Close proximity to the river
- Historical personality of West 7th
- Close proximity to both downtown and the airport

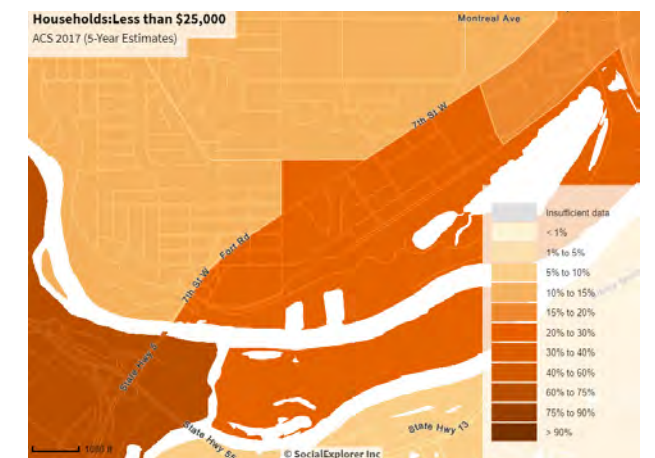
Areas Needing Improvement

Parking lots:

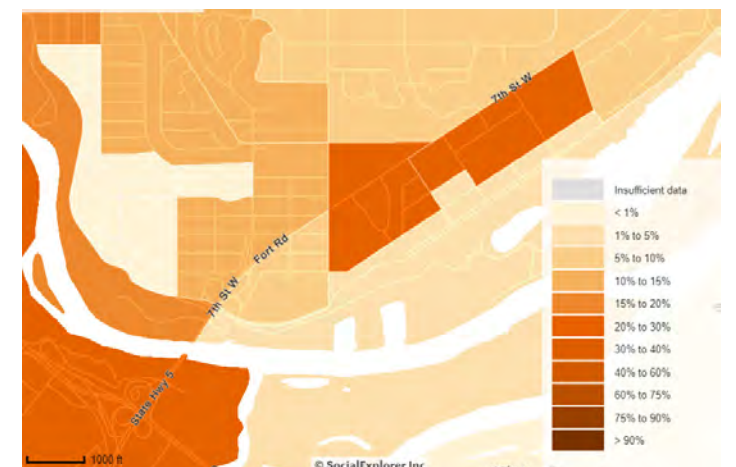
- Do not serve the community
- Create run off
- Barrier within community
- Barrier to the river
- Shepard Road pedestrian safety and traffic speed
- Lack of gradient from urban and residential to natural environment



Total Population: Black or African American People Only



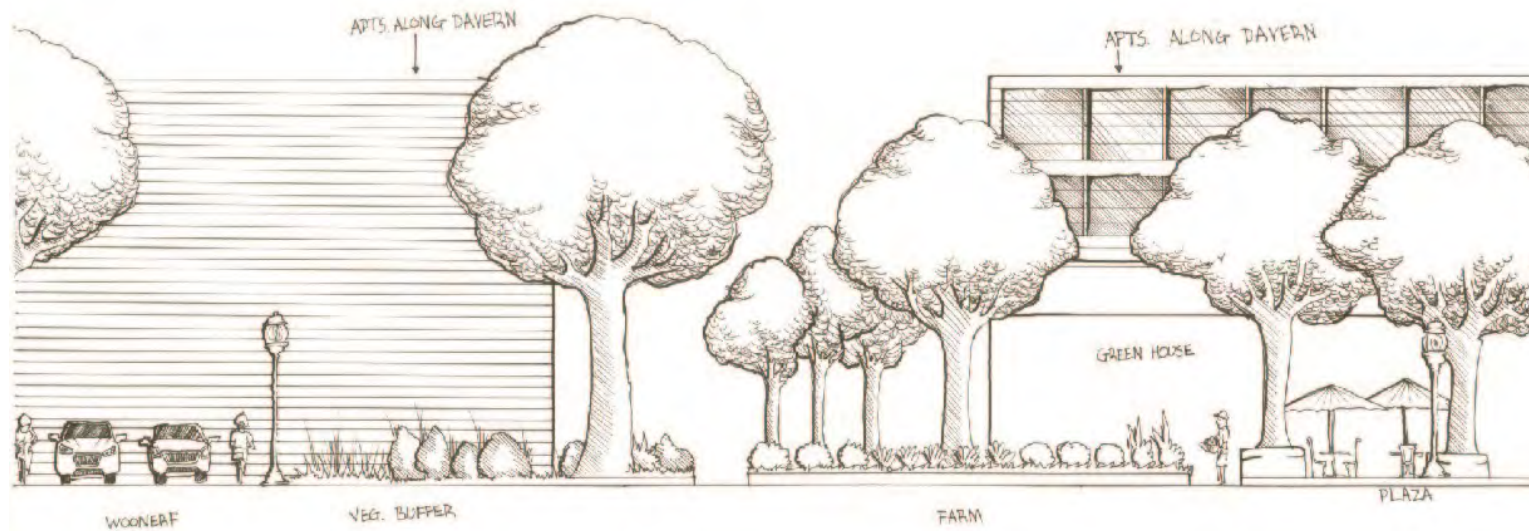
Household Income: Less than 25,000/year



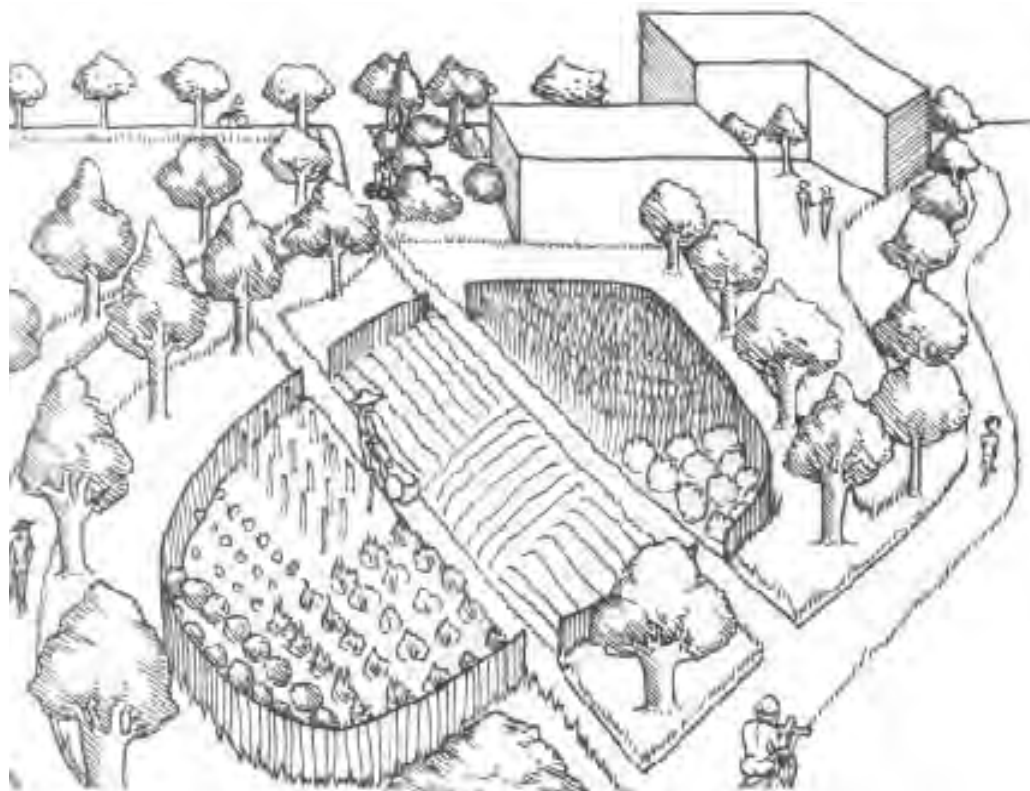
Adults Who Use Public Transit

Multi-Use Community Zone

Community Center and Outdoor Plaza



Section of Farm/Freenhouse and Plaza
Urban Farm



Perspective of Farm and Community Center



Frogtown Farm, St. Paul, MN Frogtown Farm, St. Paul, MN



Hanne Forest of Wisdom, Unsangdong
Architects, South Korea

Community Center\Plaza

- Anchors the corner of Davern St. and West 7th St.
- Community Center provides year round gathering space for events
- Plaza provides outdoor gathering space during warm months
- Both indoor and outdoor gathering spaces are important for community connection

Urban Farm\Greenhouse

- Promotes the community's diverse culture through food
- Creates learning opportunity to grow locally and healthy
- Year round food production
- Increased "green" aesthetic

Ecological Systems



Perspective of Retention Pond



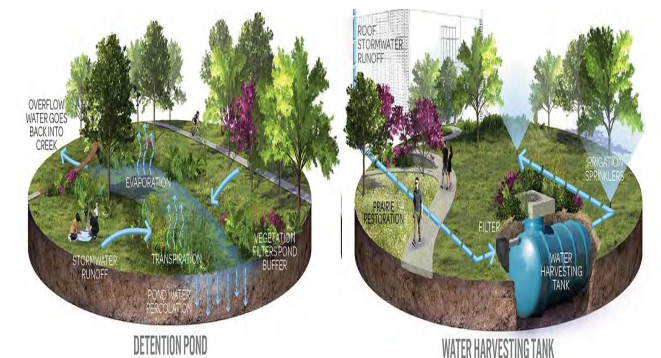
Section Cut of Retention Pond

Ecological Restoration\Retention Ponds

- Creates accessible wild greenspace for individuals who are unable to travel down to the river
- Provides additional intimate spaces in contrast to the communal park space
- Used for storm water mitigation as well as collecting runoff from the urban farm
- Potential for water reuse system that works with the urban farm
- Opportunity to educate the public on native plant and animal species

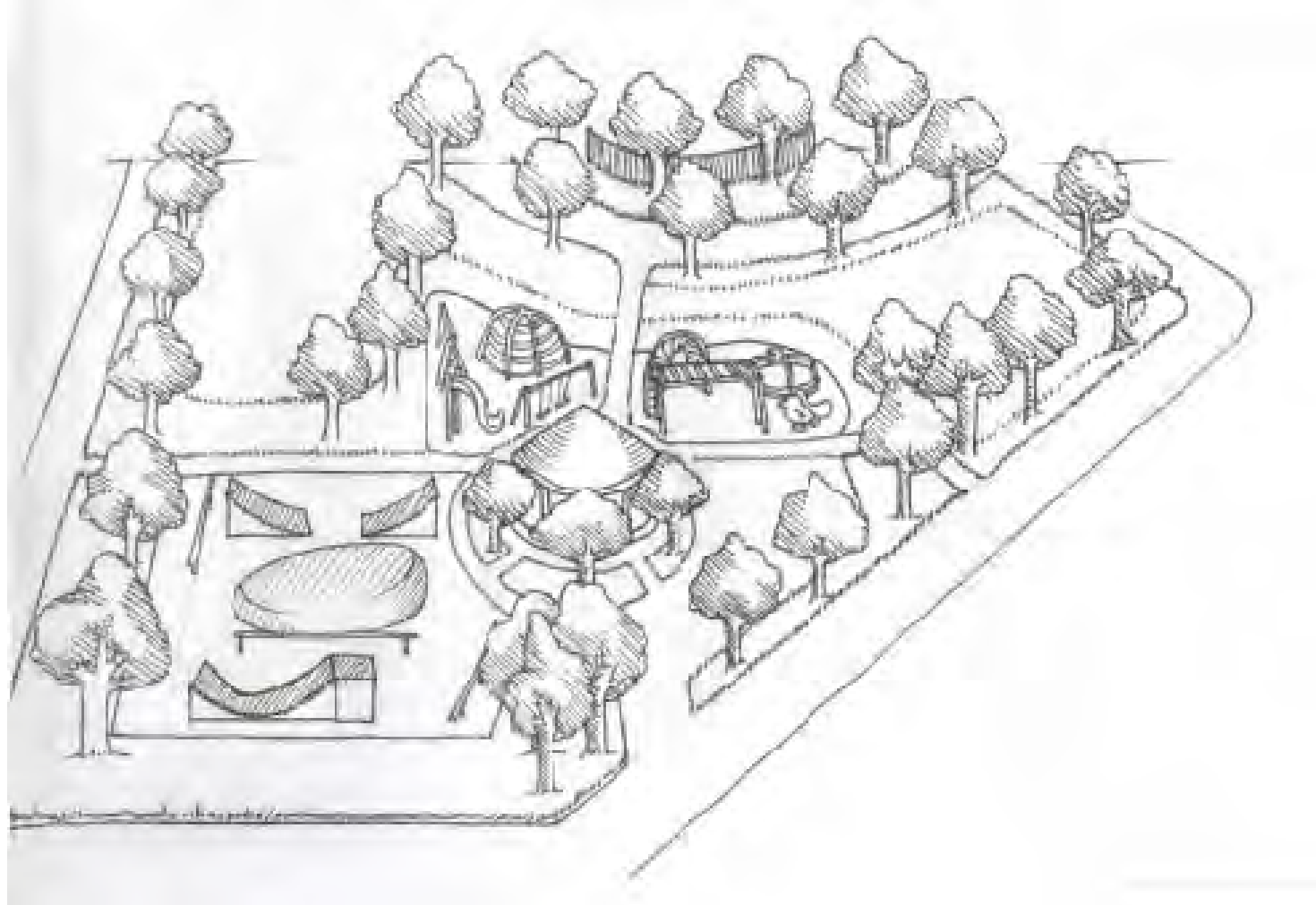


Towerside Cornerstone Community Garden



Eric Bernard, Texas Tech University

Public Recreational Space



Perspective of Playground, Pavillion, and Skatepark

Recreational Park

- Multiuse recreational amenities to provide for a broad spectrum of individuals
- Includes multi-use fields for sport and or other events
- Playground and skate park for the youth
- Adjacent spaces to the park amenities for more intimate gatherings
- Especially important for parents to easily monitor their children while at play

Shepard Road and Apartment Building

Current conditions:

- Shepard Road currently allows drivers to speed
- Unsafe feeling when crossing Shepherd road
- At this moment, Shepherd road does not influence drivers to slow down
- Apartments were added to our site to have more eyes on the park and street, creates safety for the community
- Traffic will slow down once apartments are built, makes drivers more aware that people are within the area
- Apartments will be affordable and satisfy the need for housing in urban areas

Proposed changes:

- Change speed limit to 35 MPH on Shepard Rd. along our site.
- Ideally in future phasing, change speed limit for greater portions of Shepard
- Take out turn lane medians at Davern and Shepard intersection
- Remove Shepard Rd. medians
- Add defined crosswalks and four way traffic lights at intersections



Millenium Park, St. Louis, MO

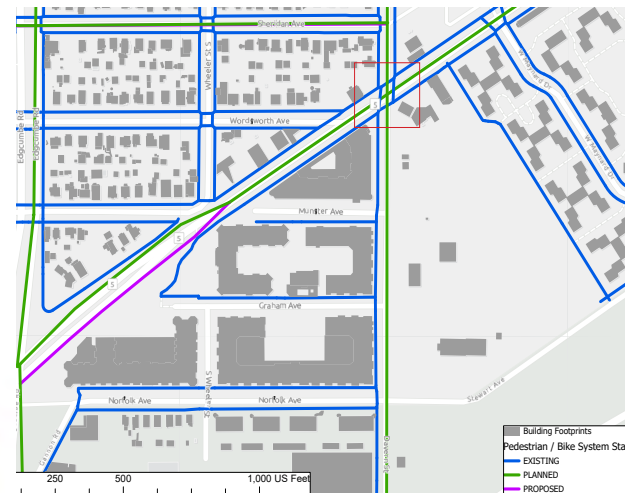


Pukalani Skate Park, Maui, HI

Circulation



Section of Road, Bioswale, and Sidewalk



Bike and Pedestrian Trails

Circulation

- In exterior circulation, there is a bike lane and a pedestrian lane with sidewalk wide enough for people to walk or bike alongside each other
- Bioswale along the exterior circulation which acts as a safety barrier from traffic
- Bioswale collects pollutants through its use of vegetation and soil
- Interior circulation contains two narrow woonerfs which would reduce traffic speed
- Adding a colonnade of trees on each side of a woonerf will act as buffers and create safety for the park visitors
- Ecological restoration\retention pond portion contain pedestrian trails that lead to intimate spaces

Connective Structure to River

- Elevated structure descending the bluff would have lookout points with seating along the path to provide scenic views.
- Meandering path would start on-grade and have a 1:12 ratio slope to be ADA accessible
- Approximately ½ a mile in length.
- Creates a more accessible and immersive experience for pedestrians and bikers to access the river
- Proposed development of the Great River Passage which plans to implement an Environmental Learning Center and National Service Headquarters at the Watergate Marina strengthens the need for improved accessibility to the river.
- The structure also has an opportunity to serve as a landmark and a public destination.
- Proposed materiality of the structure would be a cedar wood, corten steel, and reinforced concrete pillars.



Trans-Urban Connector, Fuzhou, China



Concept: Great River Passage Environmental Learning Center and National Service Headquarters



Section of Shepard Road, Structure, and River



Scale Model of Pedestrian River Structure

- 1 inch = 32 feet

Sibley Plaza

Trevor, Patrick, Preston, Lingyu, Jeff

Sibley Plaza Overview

Sibley Plaza, located on West 7th and Maynard, has been due for renovations for over a decade. There have been several plans to renovate this space; however, all have fallen through to date. Currently, there is a new plan in place, which would give Sibley Plaza's structure a modern-day face lift. Not only do we consider this a quick band-aid fix to reinvent new business, but we also believe that it is a huge missed opportunity for redevelopment and community restoration.

Sibley Plaza is not only located on what will soon be a connection from St. Paul to the Mall of America, as well as the rest of the transit system, but it is also located in an area of vast redevelopment, as well as the plans to install a bike path on an existing abandoned freightline track which will connect St. Paul to the Ford Site for bike transit.

- The first diagram is an overview map showing the Sibley Plaza site and how it connects with other surrounding areas.
- The next several images are simple renderings of what is currently in place within the Sibley Plaza site.
- The next two elevations are from a plan currently in place to basically give the plaza a facelift, rather than completely redeveloping the area.

MINNEAPOLIS

ST. PAUL

ST. PAUL AIRPORT

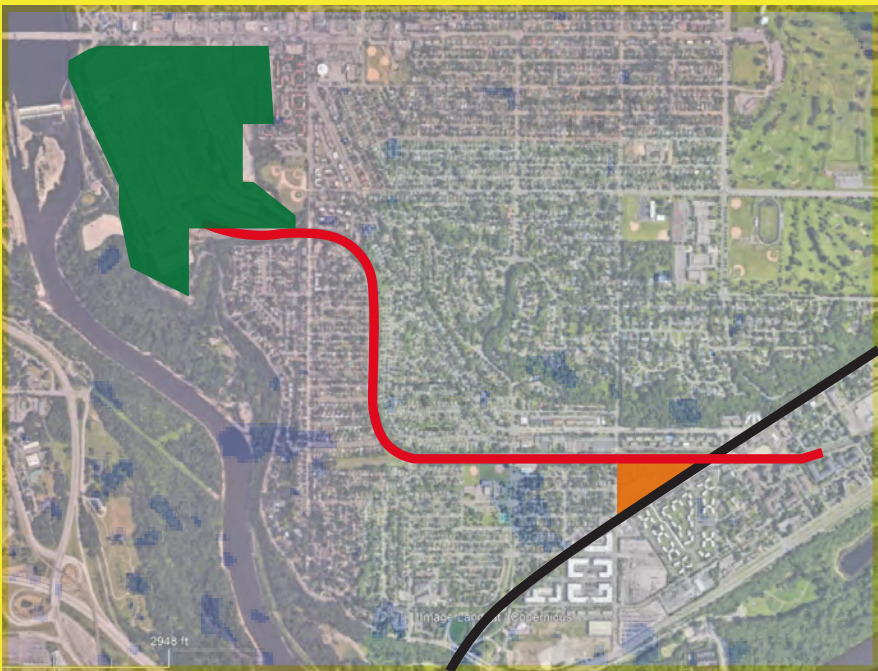
WEST 7TH

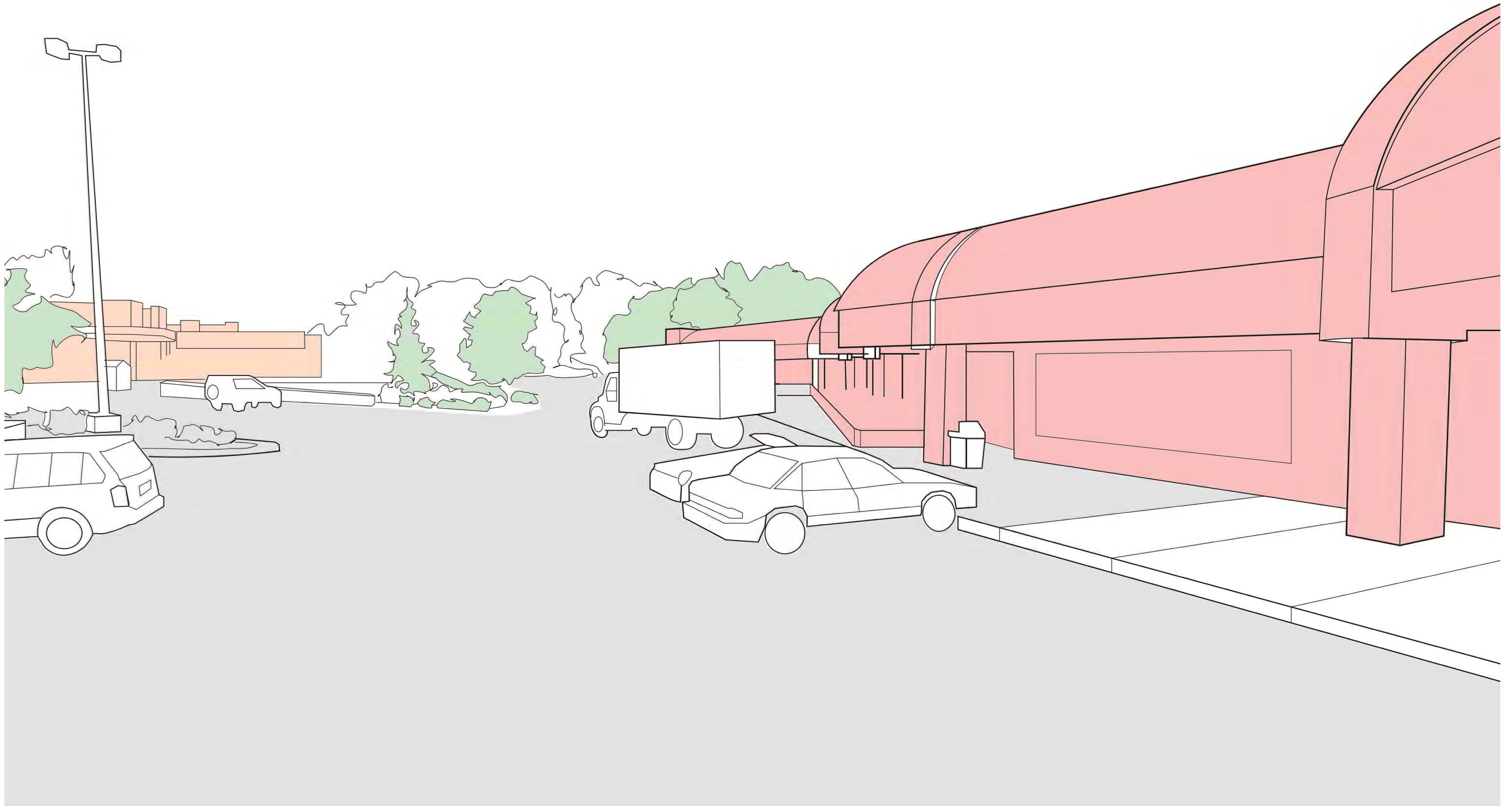
FORD SITE

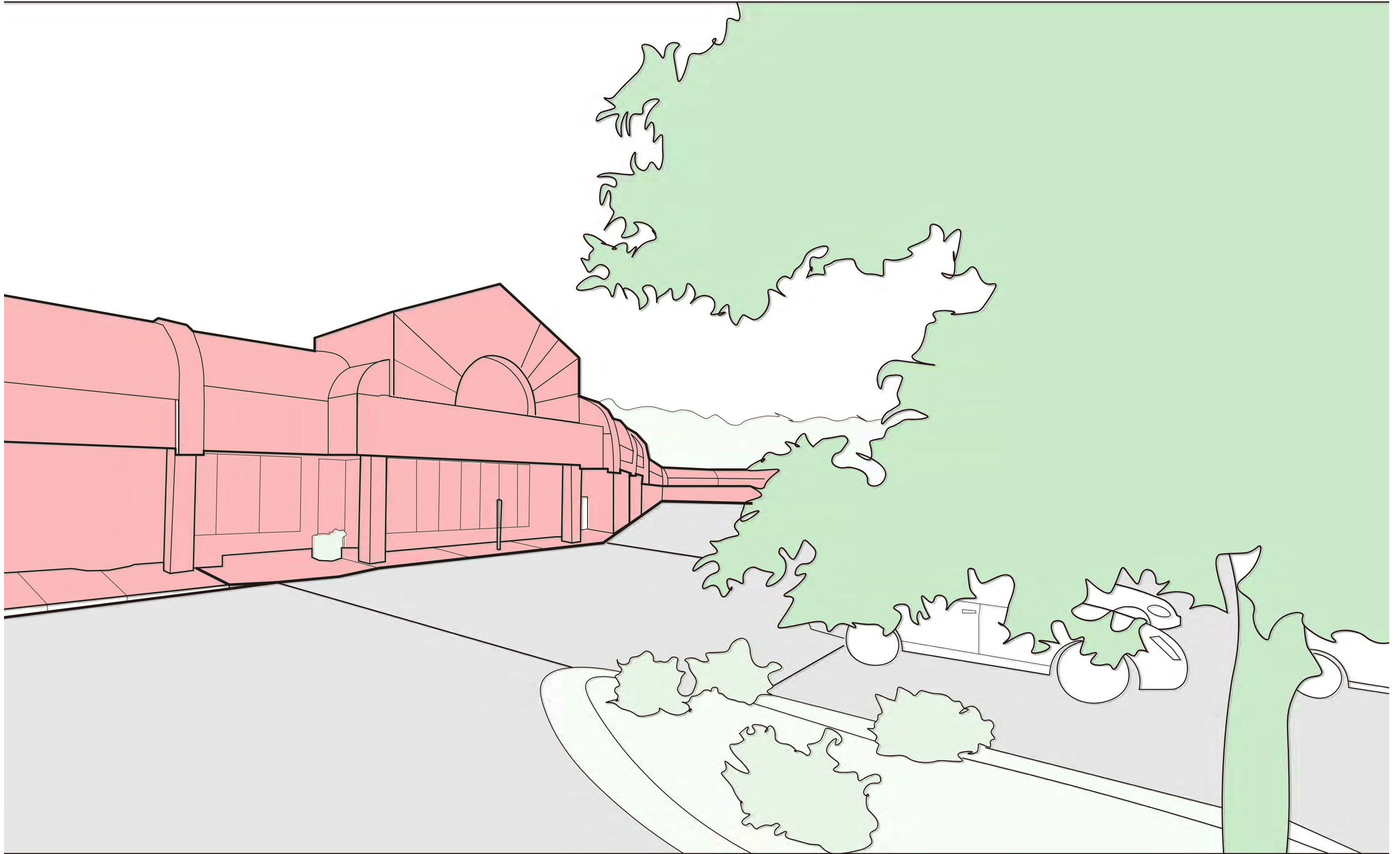
NEW BIKE TRAIL

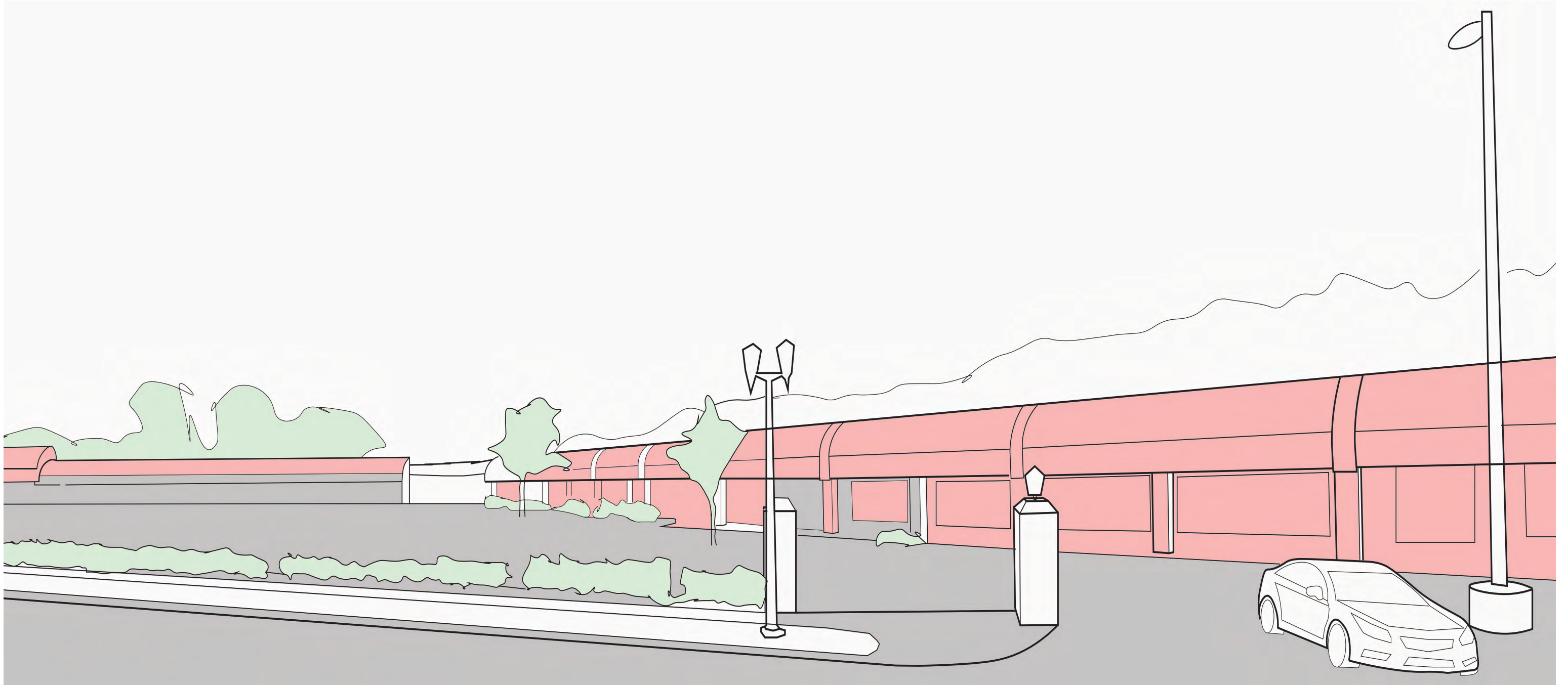
SIBLEY PLAZA

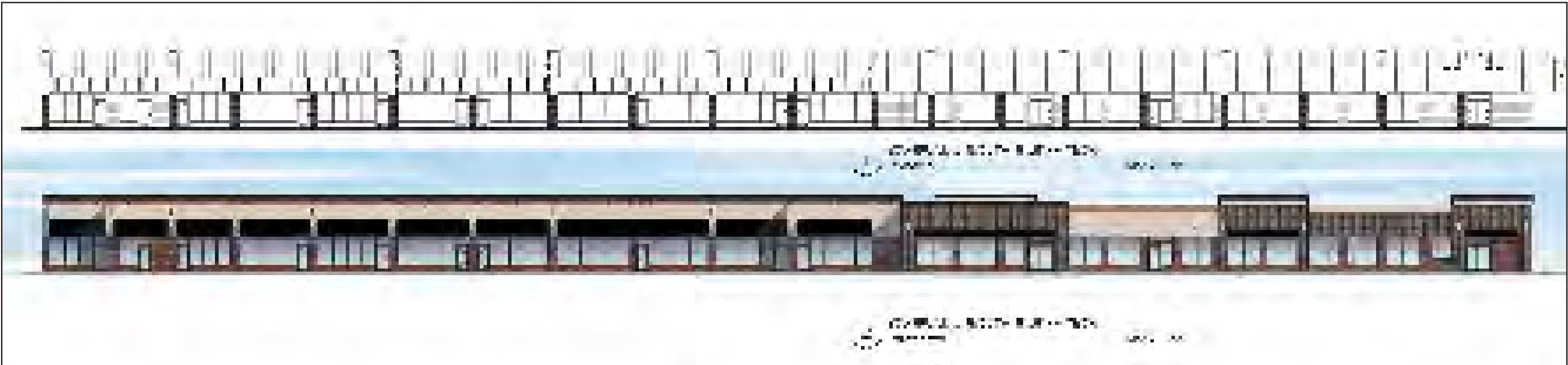
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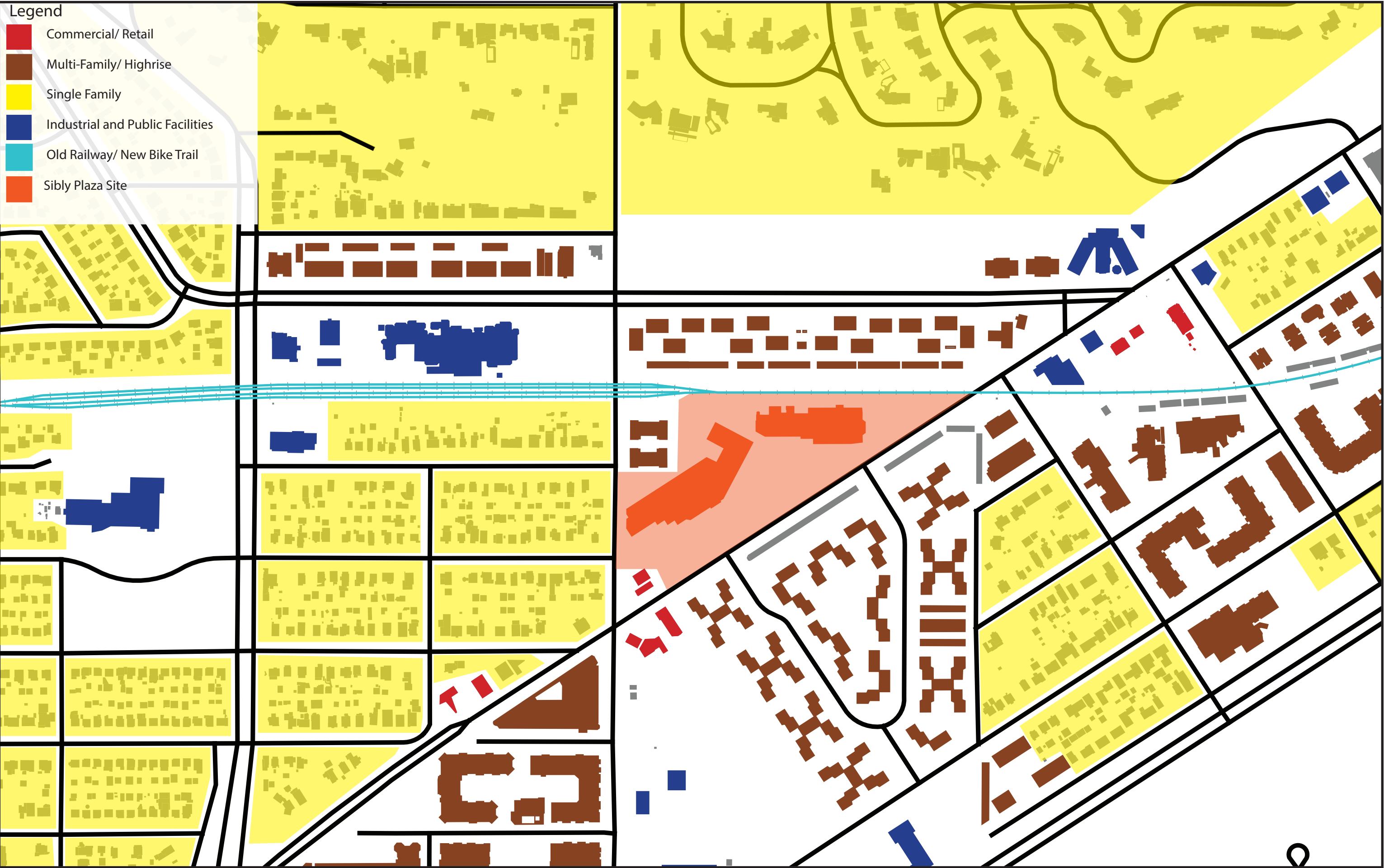


Large-Scale Observations

- The first diagram shows a large-scale diagram map showing the context of the Sibley Plaza neighborhood.
- The next two diagrams depict the density differences between residential housing and commercial, industrial, and retail buildings. These two diagrams when paired together show the immense need for revitalized Sibley Plaza where people can gather for food, social, and other needs.
- The final diagram within the large-scale diagram map section shows the density between public and private land.

Legend

- Commercial/ Retail
- Multi-Family/ Highrise
- Single Family
- Industrial and Public Facilities
- Old Railway/ New Bike Trail
- Sibly Plaza Site



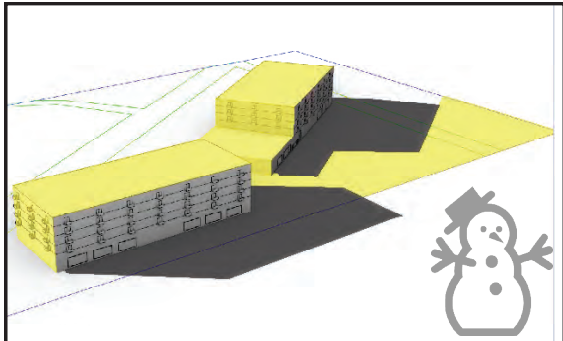
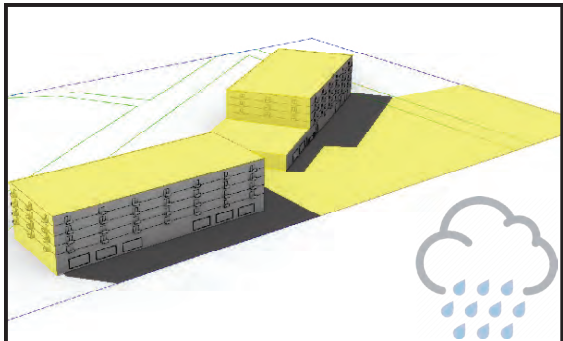
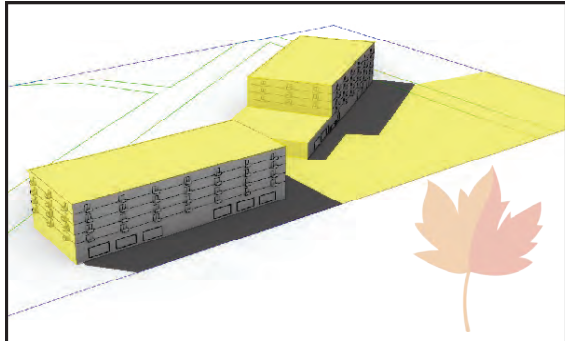
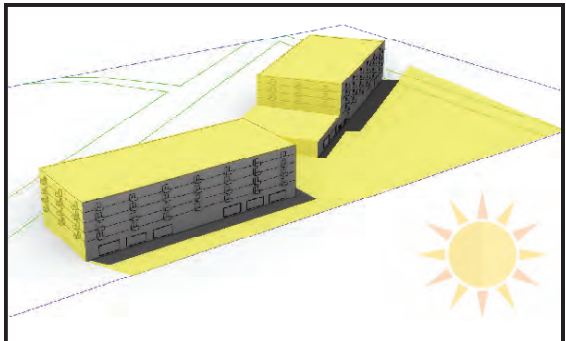
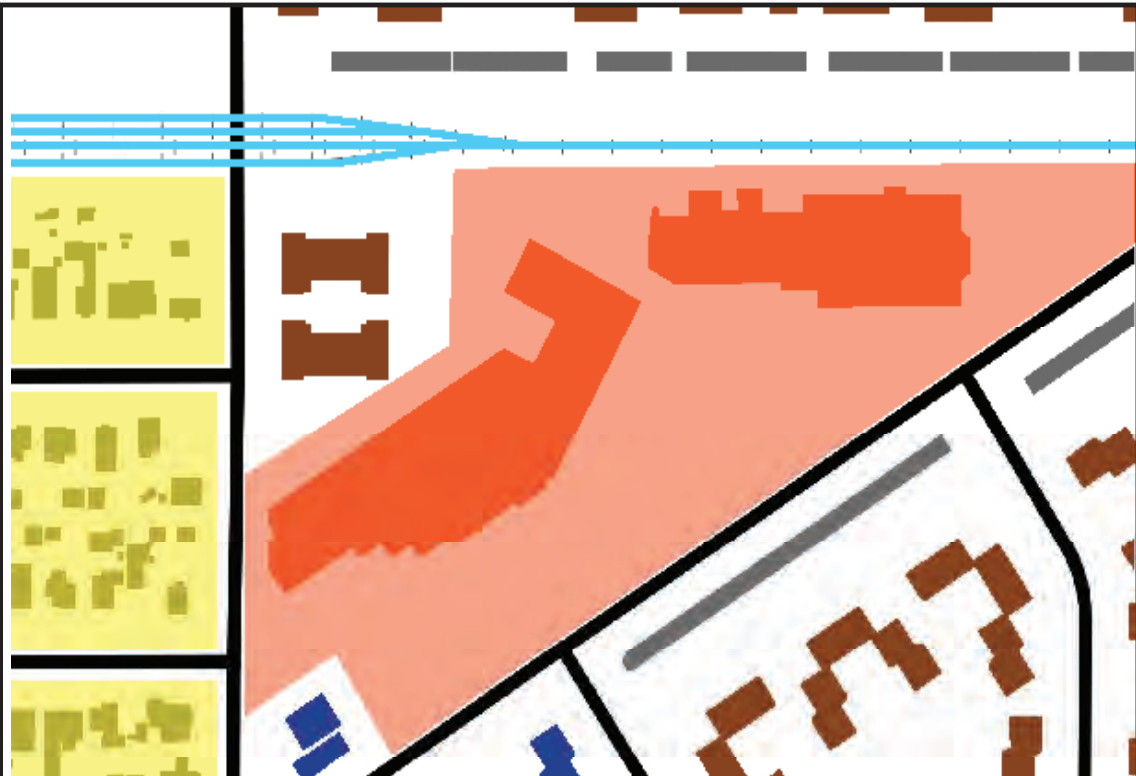
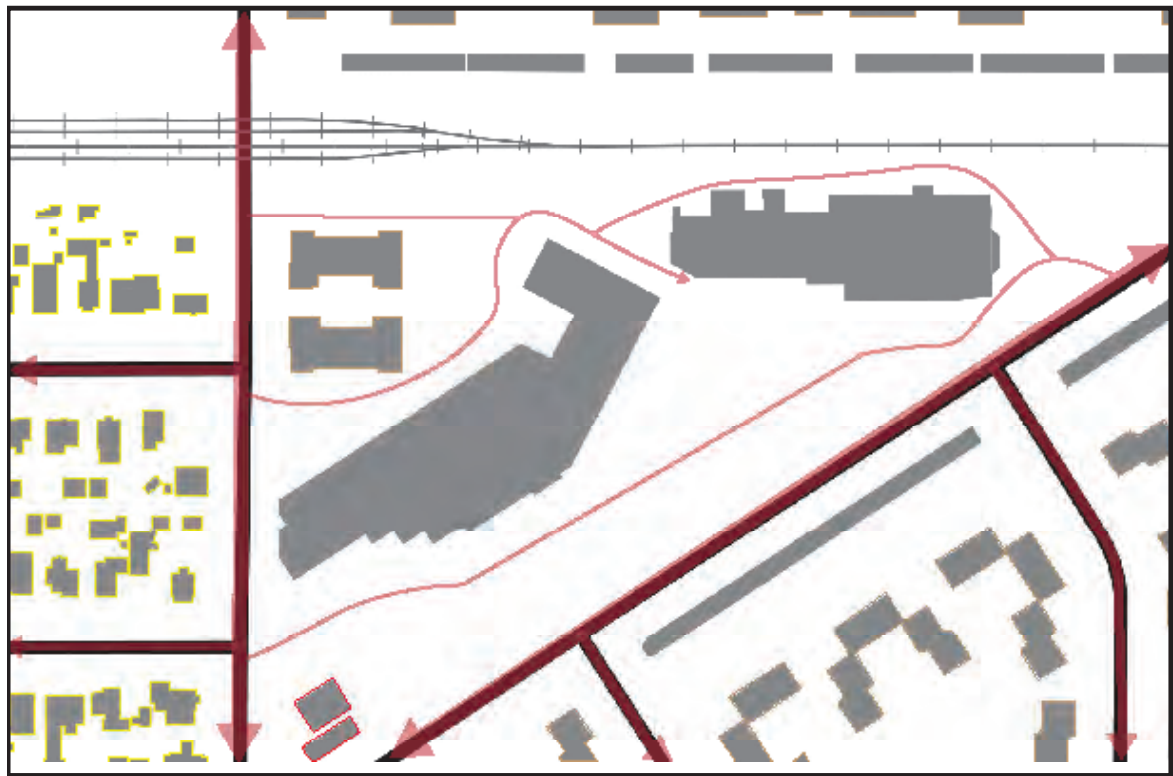
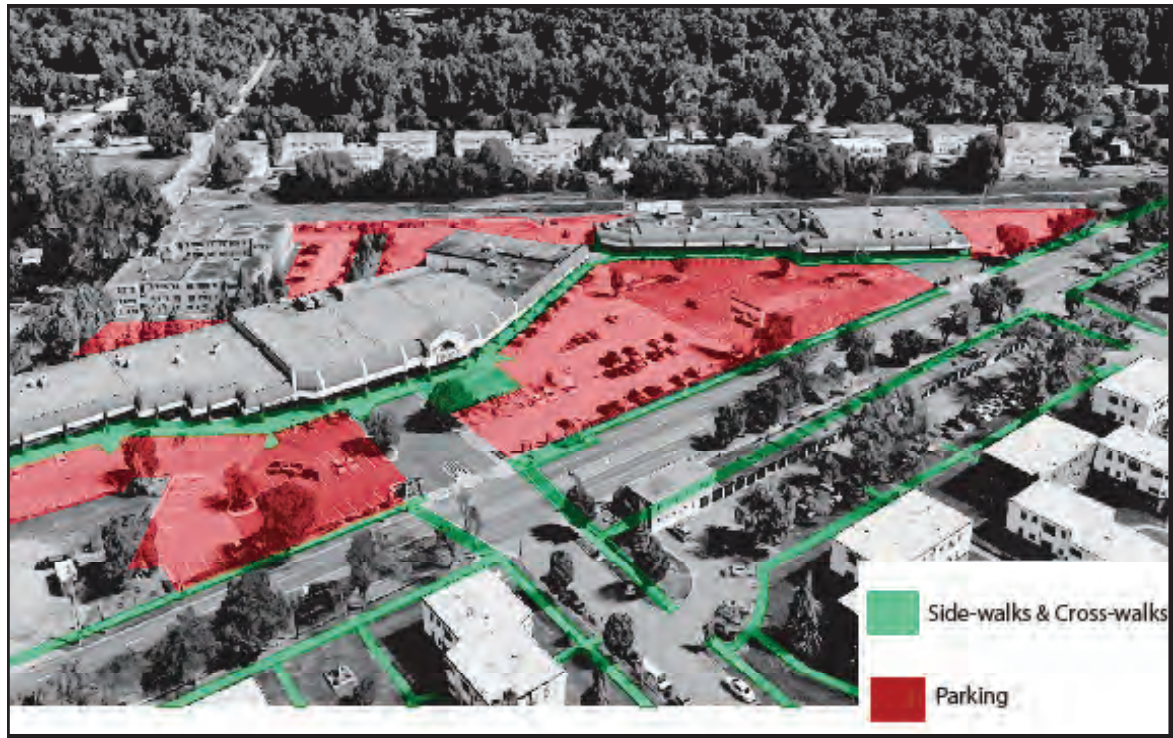






Close Observations

Apart from looking at a large scale, our team also took note on key close-observations of Sibley Plaza. We were able to highlight the circulation of an occupant in and outside of Sibley Plaza's space to which we found significant points to discuss. From that instance, within the plaza we there is a great amount of unnecessary parking space with very limited sidewalks for pedestrians to navigate through. In terms of people outside coming into the plaza, we figured how the roads such as the *arterial roads* (thick arrows in diagram) would flow into its space or effects it can deliver and connect to the plaza itself. In addition to circulation, our group wanted to refer to a proposed bike lane that would replace the old railway behind Sibley Plaza. Hence, we mentioned how impactful it would be for a bike lane to be added because it would introduce a different form of transporting oneself to Sibley Plaza and how it can an essential connection point/stop for St. Paul communities across the Ford Site to access. Using the existing building, our group added more levels for residential use and indicated the buildings effects on shade and lighting quality based on weather/seasons conditions which helped us move forward with planning our proposed redevelopment. After careful observations, our group used these aspects and were able to design Sibley Plaza to which we believed would best tackle the problems it currently has and proposed a redevelopment we found best to fit its site and communities around it.



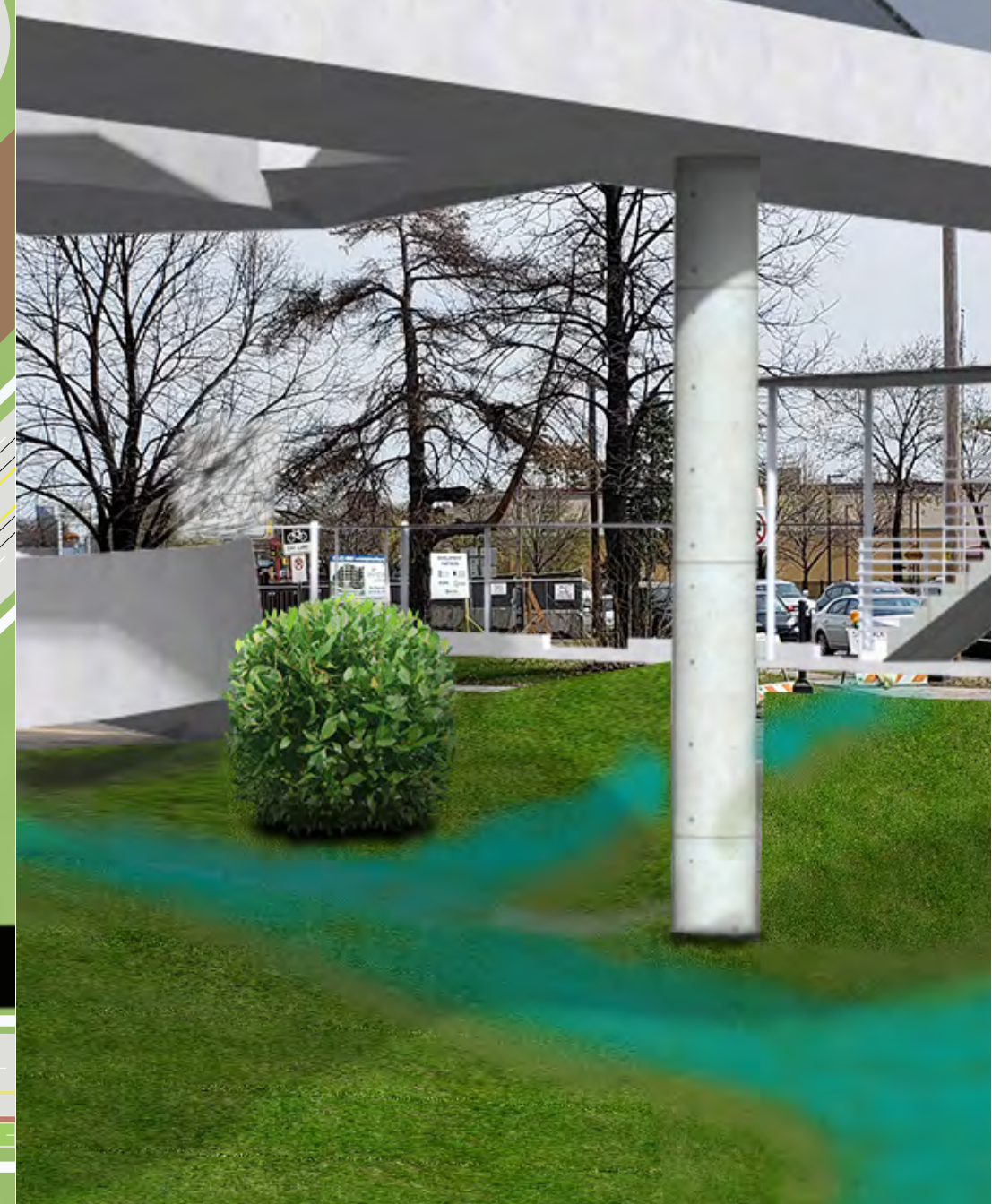
Our design for Sibley Plaza focused on turning the current parking plaza into a pedestrian mall. This design takes the current space occupied by parking and concrete barriers and creates a plaza that brings infrastructure and vegetation back to humanity. The transformation would make a move to draw the community in with its inviting atmosphere, accessibility, and needs of the community.

The streetcar will be integrated into the site rather than on the street to provide a focus on pedestrian safety, and the current unused railway North of the site will be transformed into a bike path. The current footprint of the two Sibley Plaza mall buildings will remain the same, but structure will be added to the rest of the site.

Our design also imagines apartments buildings extending above the current buildings. This is done because if we are expecting the street car and plaza design to create growth within the community, there should be housing to accompany this growth.







Lexington Ave. Redevelopment Project

Arch 3250 / LA 3002

Crystal Jehly, Dan Mahoney, Eamonn Casey, Ethan Miller, Eugene Agyili, Michael Dunst

Introduction



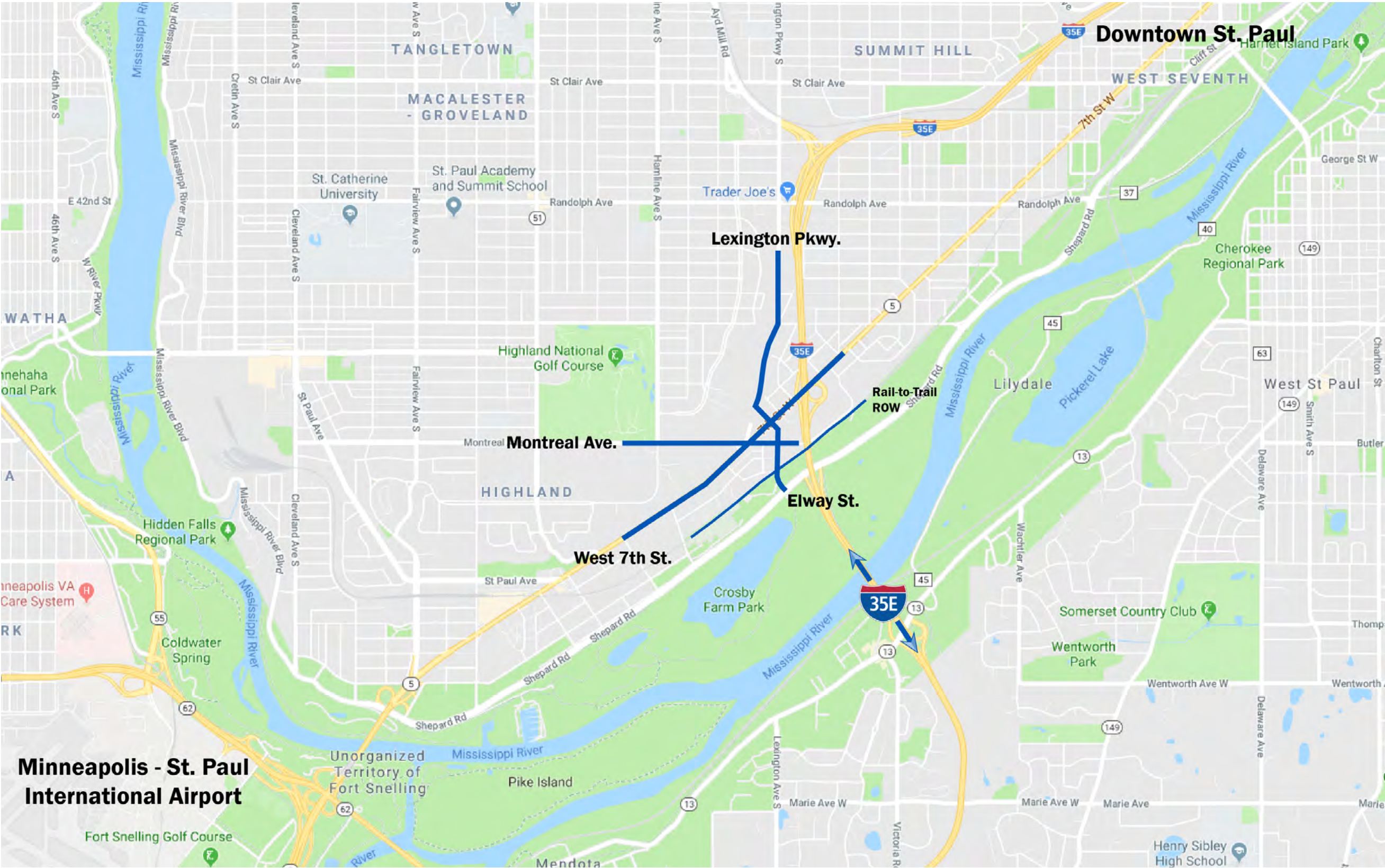
The Lexington Avenue streetcar stop provided a unique site for this semester's project, tucked between a bluff and a new development. Working with these constraints, we designed a streetcar stop that not only provided access to transportation for people of all ages, we also created a new destination point for the whole neighborhood.

Context

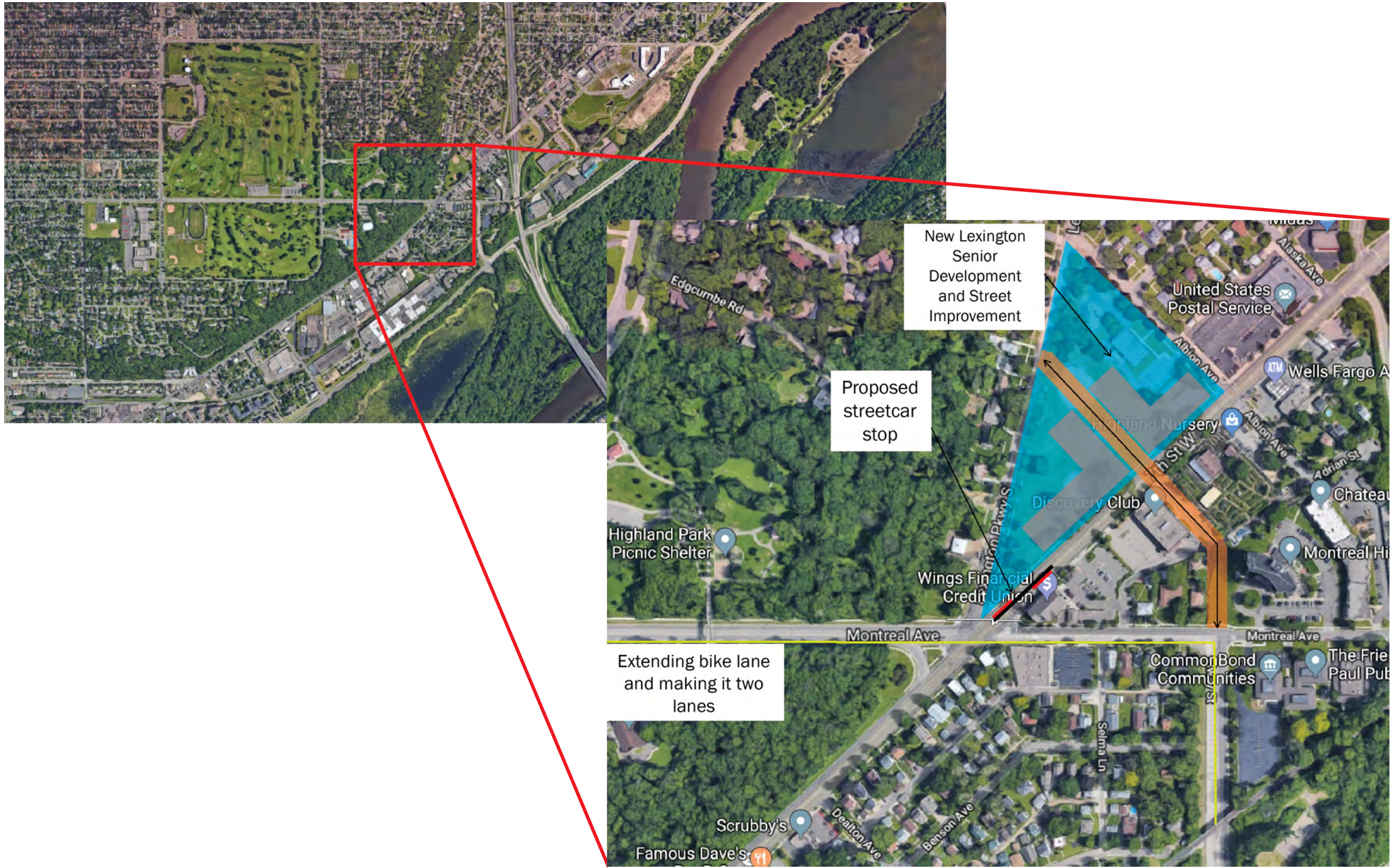


Our site sits at the intersection of three major corridors, Lexington Ave, Montreal Ave, and West 7th Street, all of which are either designated truck routes, or carry very large amounts of traffic. Located almost exactly between downtown St. Paul and the airport, it sits in a neighborhood that is an interesting combination of light industrial, single family housing, and multi-family housing. The immediate area around our site has a fairly wide range of programs, and there are many different neighborhood niches and anchor institutions that would draw someone to the region via the streetcar. This patronage would be in addition to the people who would take it for reasons besides coming and going from their home or place of employment in the area. For instance, there are a number of schools (public, private, and charter, for multiple age groups), a number of recreational spaces (such as the trail head, golf course, swimming areas, and sports fields/rinks), and a variety of dining destinations (ranging from grocery store, small dinner, or large family restaurants).

Major Through-ways



Design Considerations



Destination Map



- Academic
- Recreation
- Multi Family
- Food

Figure/ Ground Map



Zoning Map



- R1 One Family
- R4 One Family
- I1 Light Industry
- T2 Trad. Neighborhood
- RM3 Multiple Family
- RM2 Multiple Family
- OS Office-Service

Analysis



Precedents

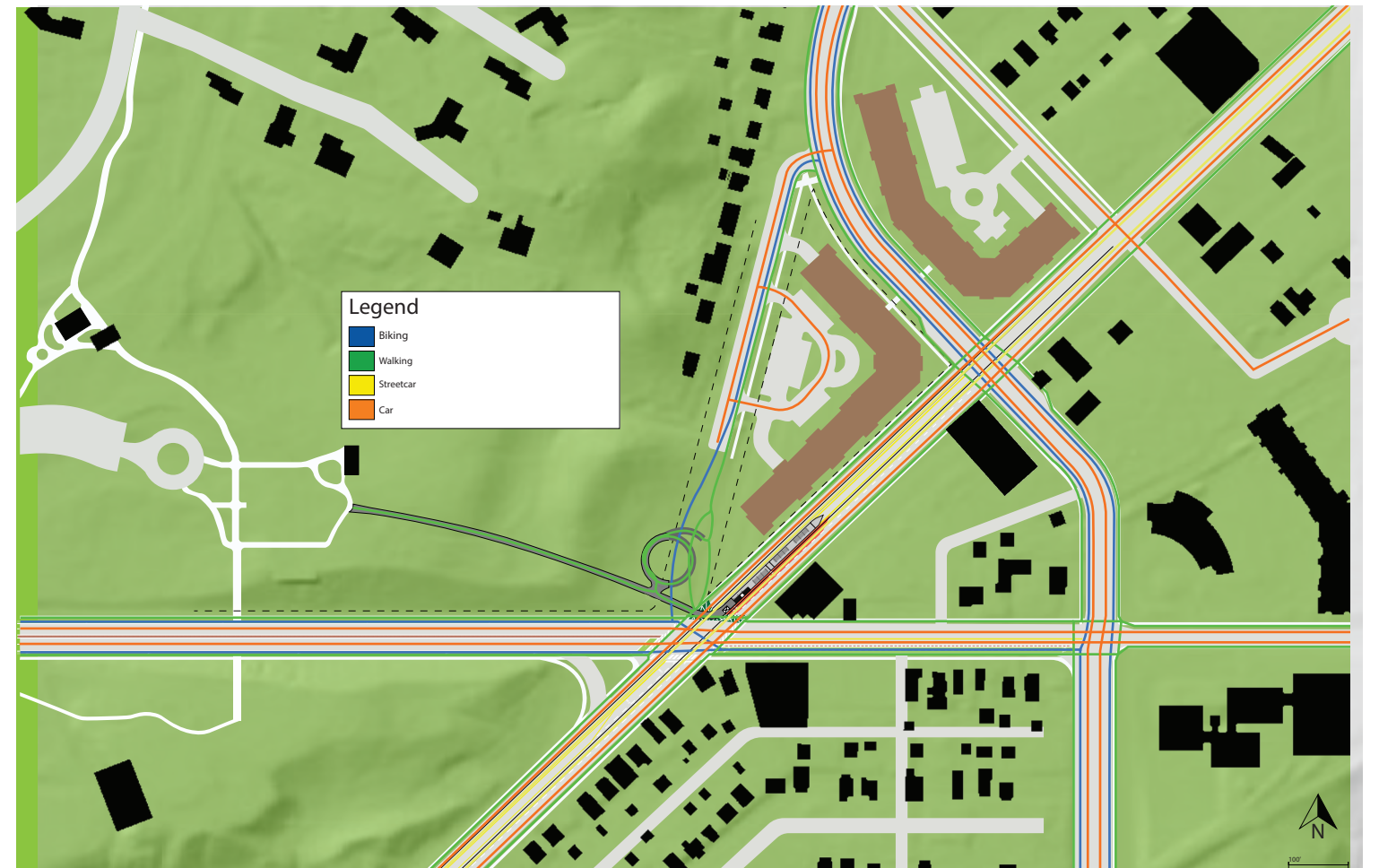
The precedents we referenced during our planning stage addressed ways for us to rethink infrastructure that is tried and true and to make it more creative and momentous. Creatively redesigning simple infrastructure in this way can enhance the public experience, increase walking potential, and maximize safety in the area as cars slow down with more infrastructure at the human scale rather than at the automobile scale. An example of this phenomenon can be seen in “creative crosswalks”, which increase the likelihood of people to walk on them as well as decrease the average speed of cars driving over them.



Analysis

Circulation

The current circulation of the Lexington/Montreal/W 7th intersection will be changed very soon because of existing development plans for the area, during which two senior living centers will be built just Northeast of the intersection on W 7th. Lexington Ave will be redirected NE as well, running between the two senior centers. This will greatly simplify traffic at the intersection, reducing it to a four-way rather than a five-way intersection. Our plans for the intersection compound on this idea, as we suggest that left turns be allowed on the new Lexington but not at the intersection of Montreal and W 7th, simplifying traffic at that intersection even further. We also plan to lengthen bike lanes through Montreal as well as the new Lexington, which would extend bike connections South toward the river.

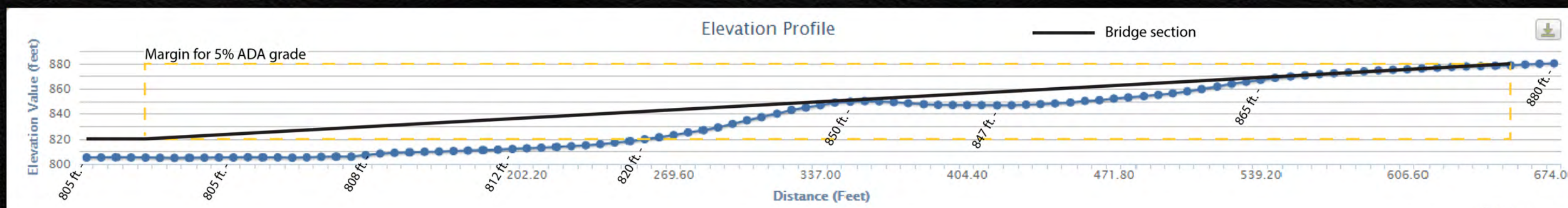


Analysis



Topography

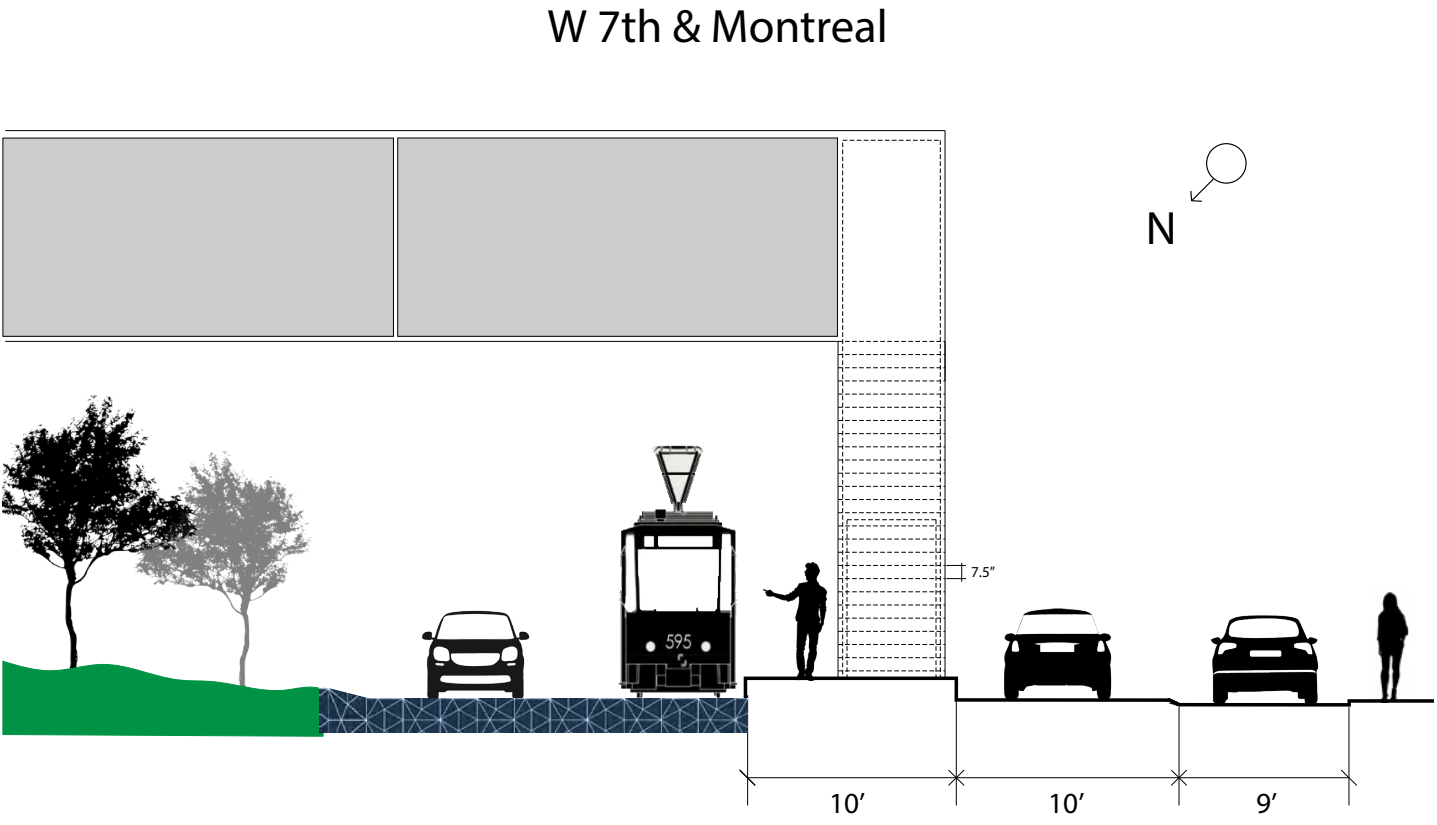
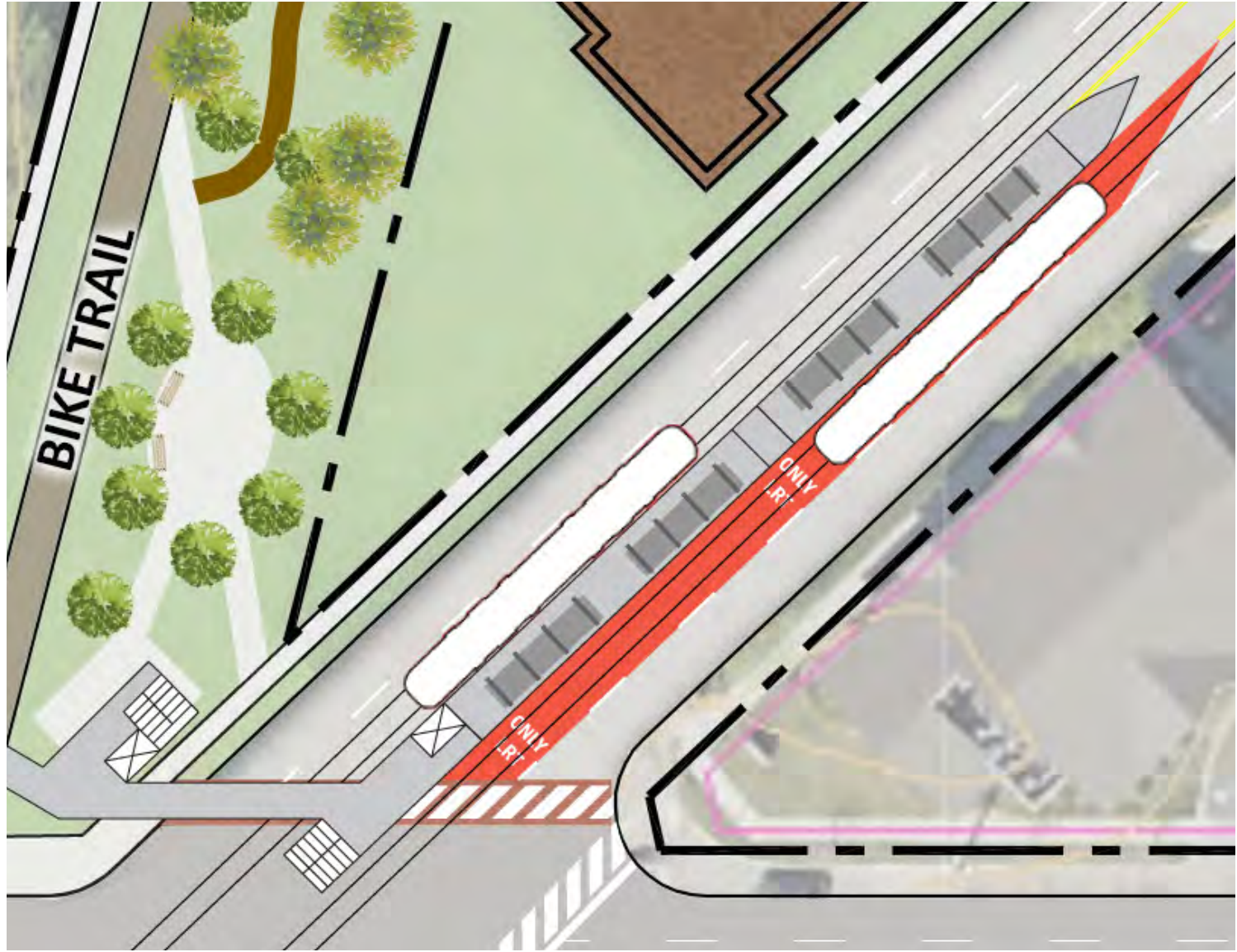
The topography of our site became the biggest challenge and thus the biggest influence on our final design, because bordering the north side of W 7th is a bluff with an approximate 80' increase in elevation. As the bluff creates a very abrupt border between the W 7th corridor and the neighborhoods at the top of the bluff, our main concern was creating a better connection and increasing walk-ability from the top of the bluff to the bottom, and vice versa.



Design

Station

The main idea behind the station was to allow another safe way of passage for all ages to get from where they were whether that may be the bluff, the senior living community, or somewhere else to the station. We first started basic with an elevated sidewalk with a bollard design protecting the sidewalk where a ramp would be implemented for the elevated sidewalk. After seeing how this could potentially be successful we wanted to focus on connecting accessibility to the bluff as one of the key concepts to our project. So the first main big idea for a station was a sky bridge that would connect the top of the bluff down all the way to our streetcar station. We thought about stairs and an elevator at the streetcar station and near the West corner of West 7th and Montreal. This was a great idea at first before looking into cost, overall size of this structure, and how complex the site would become. We wanted something to connect all spaces but wanted something a little more natural and pleasing for pedestrians so the space didn't have a giant structure ruining the connected natural spaces.



Design



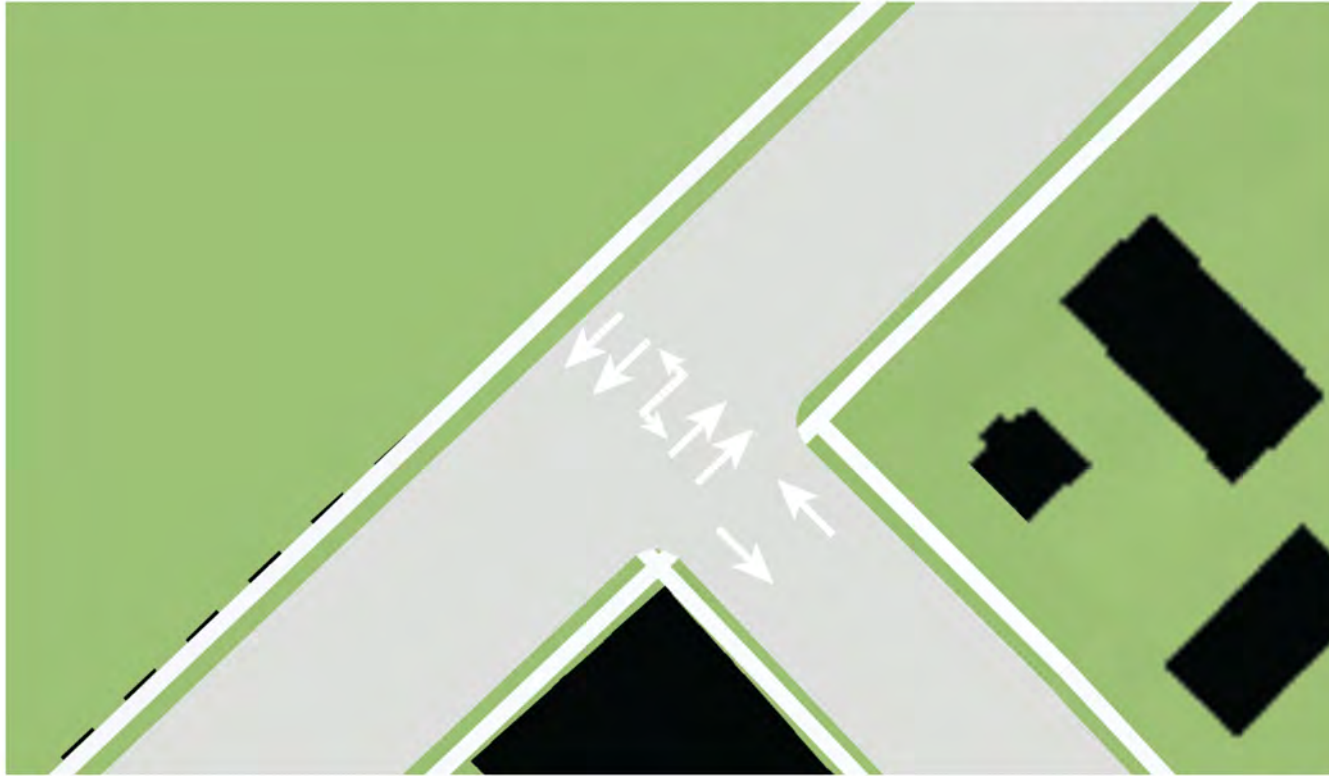
Station

The final Station design communicates a program which is consistent with safety and accessibility. It employs a minimalist approach in the materials used, speaking in terms of volume and the configuration of its structural elements. Apart from the aesthetic benefits of such an approach, the costs were further reduced from the original design which had a second elevator within the park area. The elimination of the second elevator ensures that the experience of users is an interactive one. Polished concrete was considered owing to its high thermal mass qualities.

The Pedestrian footbridge extending from the station to the lookout point has a transparent roof that provides a panoramic view of the street and park scene to enhance the experience of users. It is left uncovered as it branches off into two paths, being the Spiral ramp within the park area and the extension towards the peak of the bluff. We reconstructed the lane layout in order to make vehicle circulation as safe and fluid as possible.

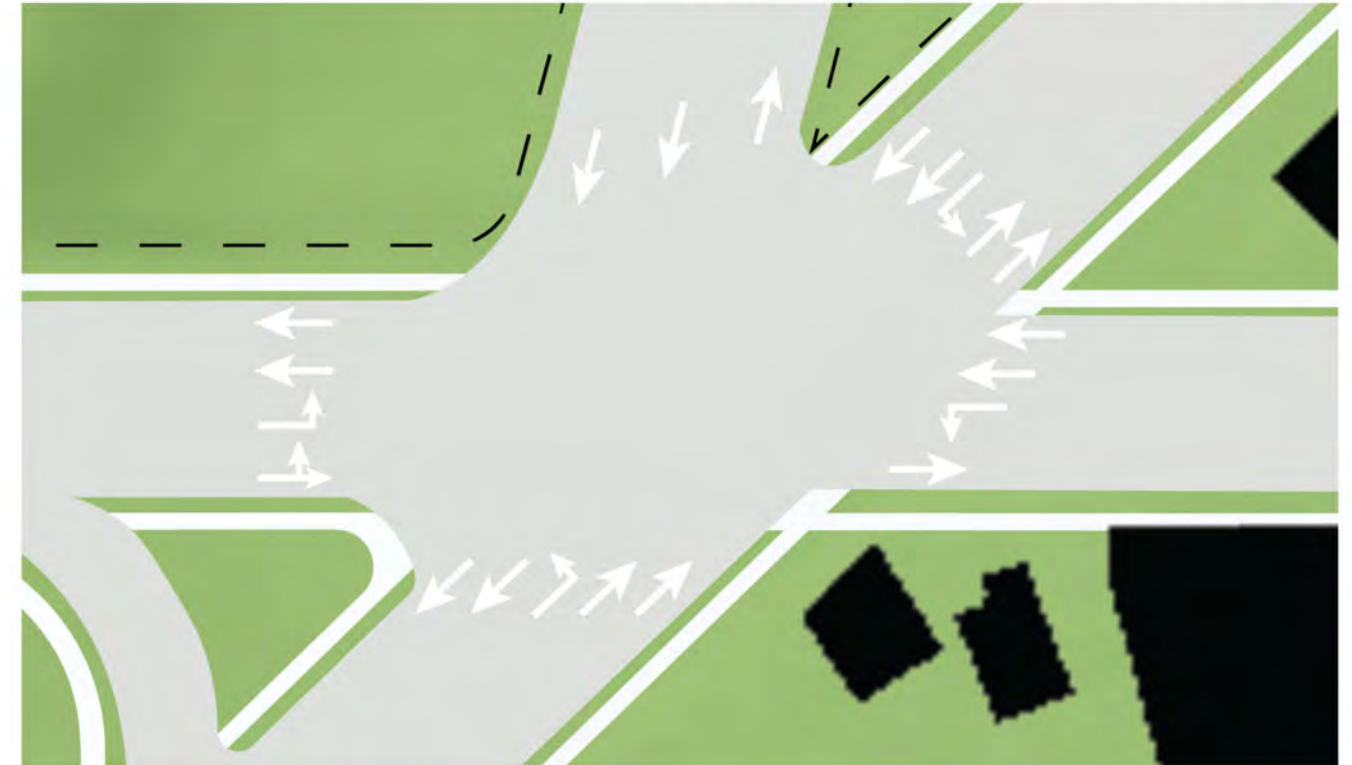
Old

West 7th & Elway/New Lexington Pkwy



Old

Montreal & Lexington & West 7th



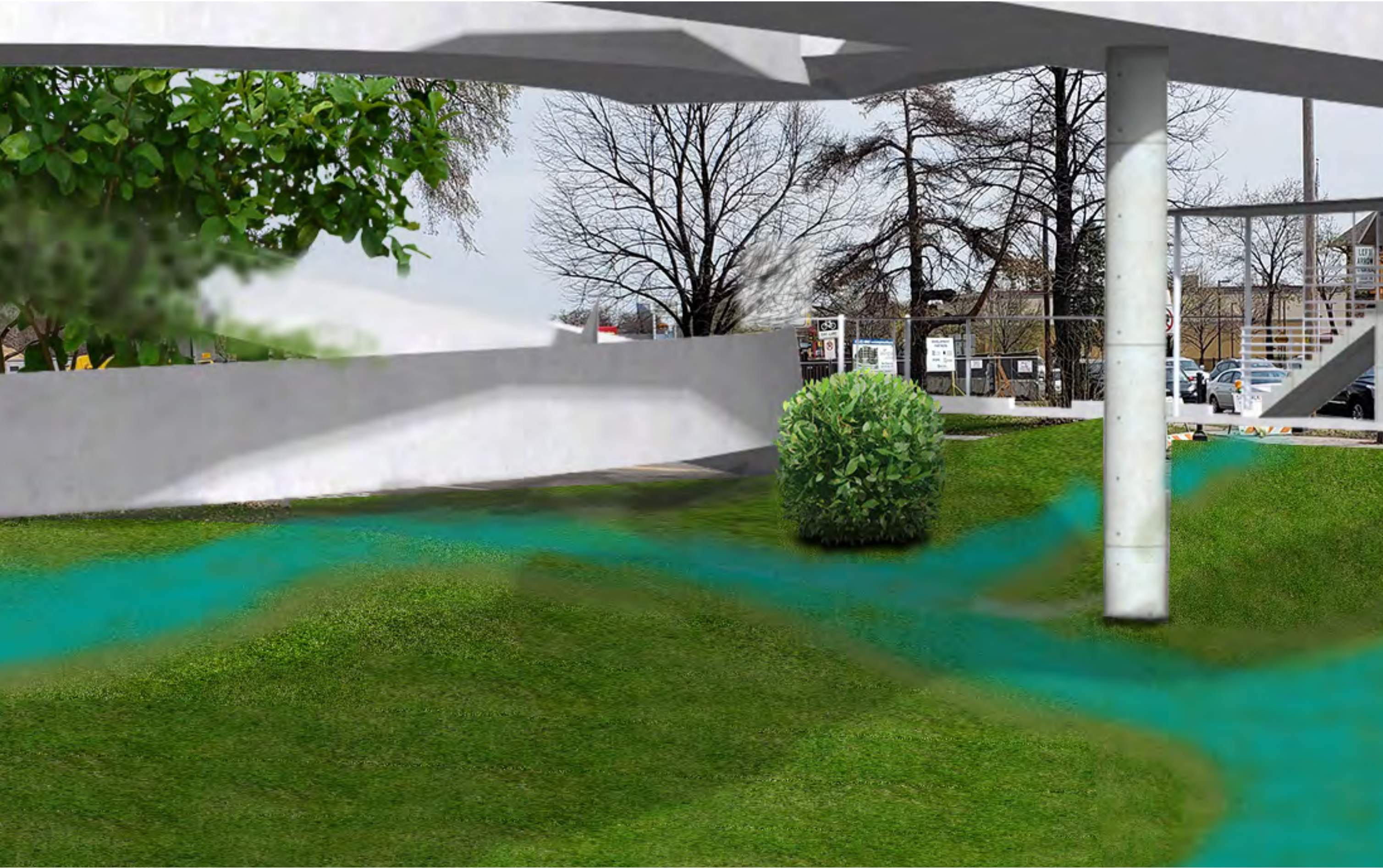
New



New







Design



Park

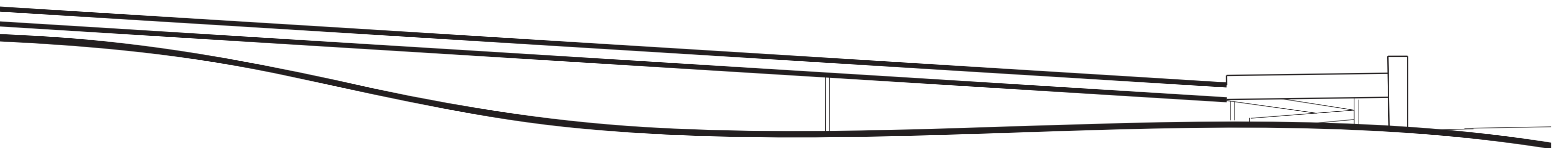
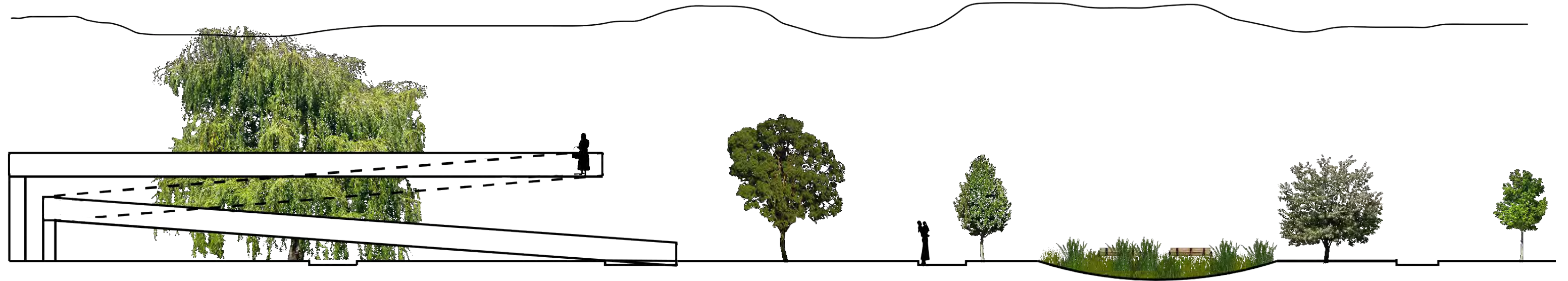
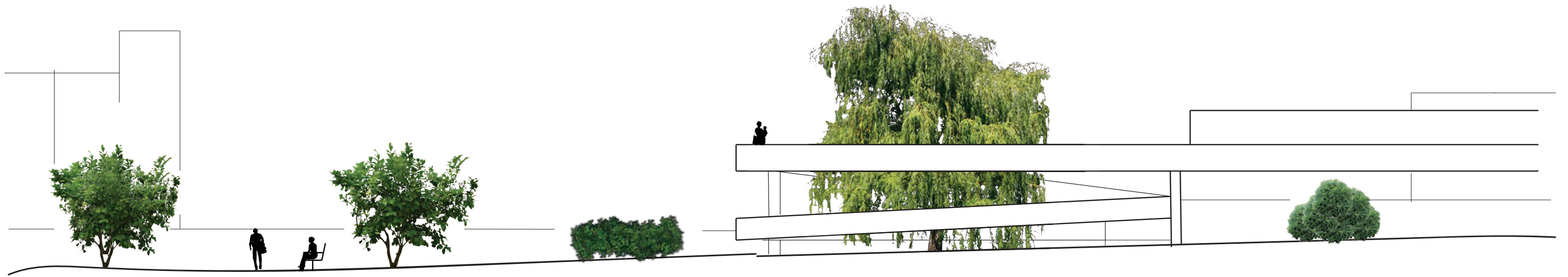
When designing the park we thought that it gave a great opportunity to create a central hub for the neighborhood. There were several community aspects that we wanted to address with our park design. These considerations were how pedestrians would move through the site, specifically the elderly at the new senior living development and the children going to and from school, as well as how the park connects to the bluff. The park would be a safer alternative to the bridge over Montreal that is in more of an industrial area. To make the route safer for the kids walking to school, we made sure there was adequate lighting throughout the park as well as having the park area being visible allowing for more “eyes on the street”. To help cater to the elderly we placed seating frequently along the main path. As well as connecting the park to proposed Memory Garden at the Senior Living Home, giving the easy access into the park. We also made sure our connection to the bluff was ADA compliant to ensure everyone would be able to use it.



Design

Park

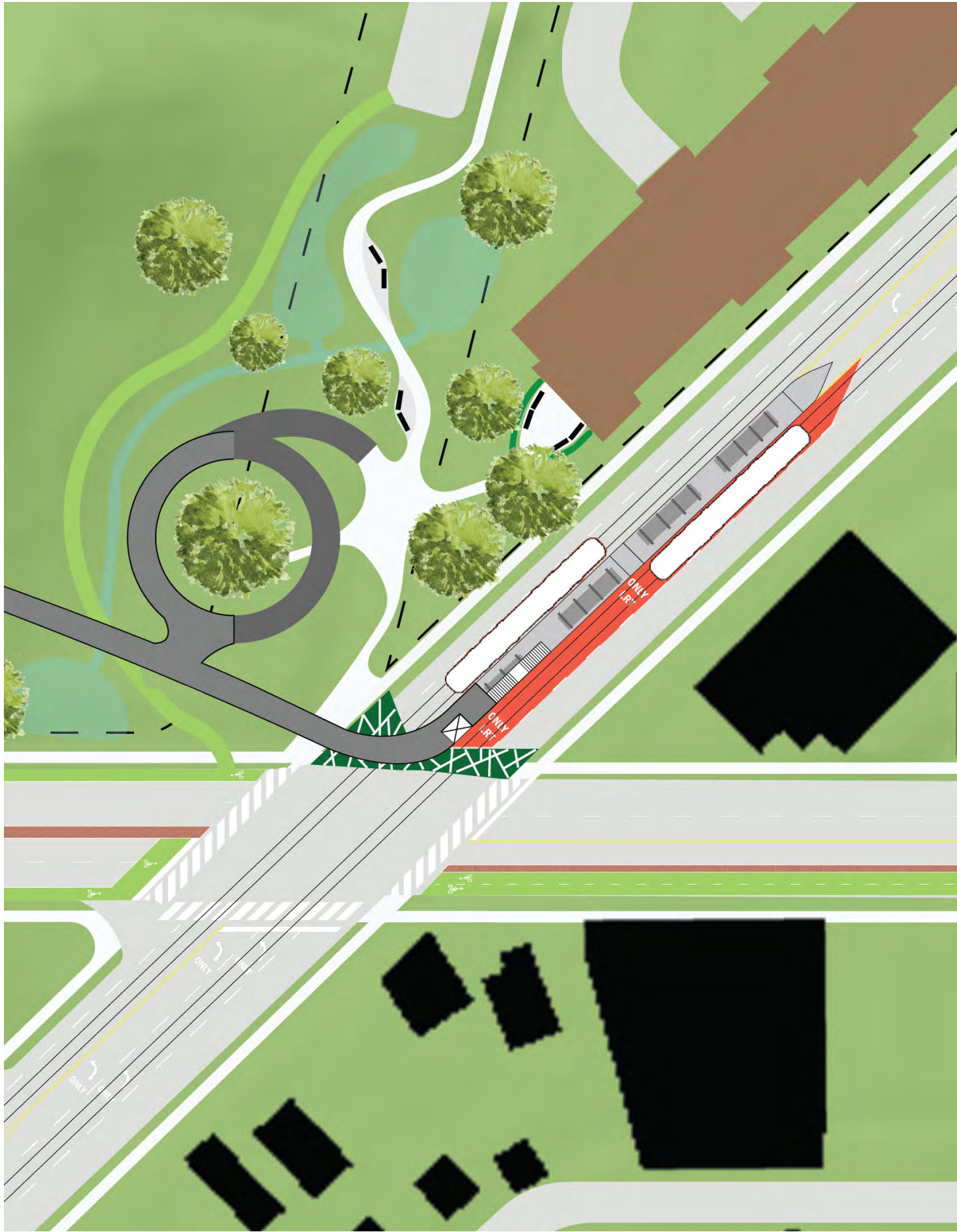
A major consideration when designing the park was how the park would relate and connect to the bluff. The two major challenges presented by the bluff were runoff coming down the bluff into the park and moving people from the park to the top of the bluff. To manage the storm-water running into our site we decided to use a system of bioswales through out the park, to hold or at least slow down the water moving through the site. We decided that the best way to move people through the site and to the top of the bluff would be a spiral ramp and a bridge. Since the bridge and ramp are both have an incline of 5% or less, allow almost all pedestrians to get to the top of the bluff.



Design

Phasing/Bridge to Station

While our final goal is to connect the station, the park, and the bluff with our bridge, we also realize that all of that comes at a steep cost. Instead, we decided to design it in phases. The first phase would include the most important parts - the station, the park, and the bridge connecting the park and the bluff. We see the bluff as the largest obstacle at our site which is why we prioritized that section of the bridge. Then, if future funding allows it, we would extend the bridge to connect to the station. This would provide riders with the safest route from the streetcar to the park, the senior living development, and the bluff.



Future Considerations

The most pertinent thoughts to consider moving forward with this project were increasing programmatic details in the park area to utilize the space more effectively, going into more detail about the connection of the bridge to Walsh Park on the bluff, and exploring more details about how to connect the site to Crosby Farm Park and the river. While there was much attention paid to the bridge design itself, the connections we chose for the bridge to make can be expounded upon in much more detail. Similarly, the park was designed very thoughtfully but the value of flat green space near the bluff is rare and valuable- an important consideration would be to use this land for more design or infrastructure because of how much space the bluff takes from potential park design.

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Pedestrian Safety on West 7th

Yunlu Zhang

LA3002
Saint Paul, MN

Introduction

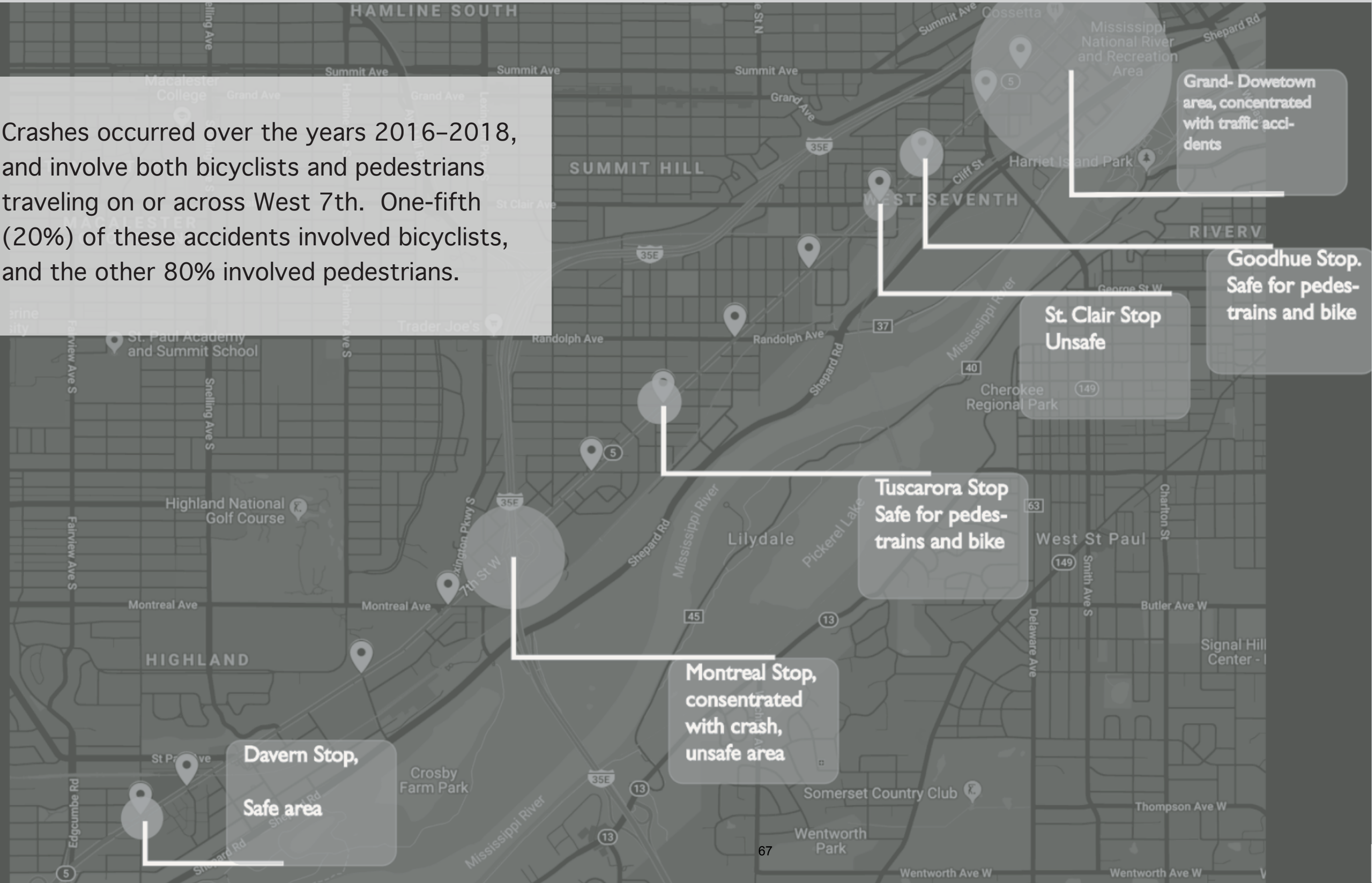
I worked individually on pedestrian safety issues on West 7th. The crash map I made demonstrates the area with a relatively high number of accidents.

The Montreal and downtown areas are the most unsafe areas of West 7th. I chose to analyze Montreal because most crashes that occur in the downtown area are mostly due to the high traffic volume. However, Montreal is a residential area, so there are many different causes that can lead to unsafe conditions. The analysis map of the Montreal intersection demonstrates the current conditions and problems.

In order to improve safety, I identify some strategies such as bump-outs, pedestrian scale furniture, etc. I redesigned the intersection, incorporating some of these strategies. The section diagram explains the designs in more detail.

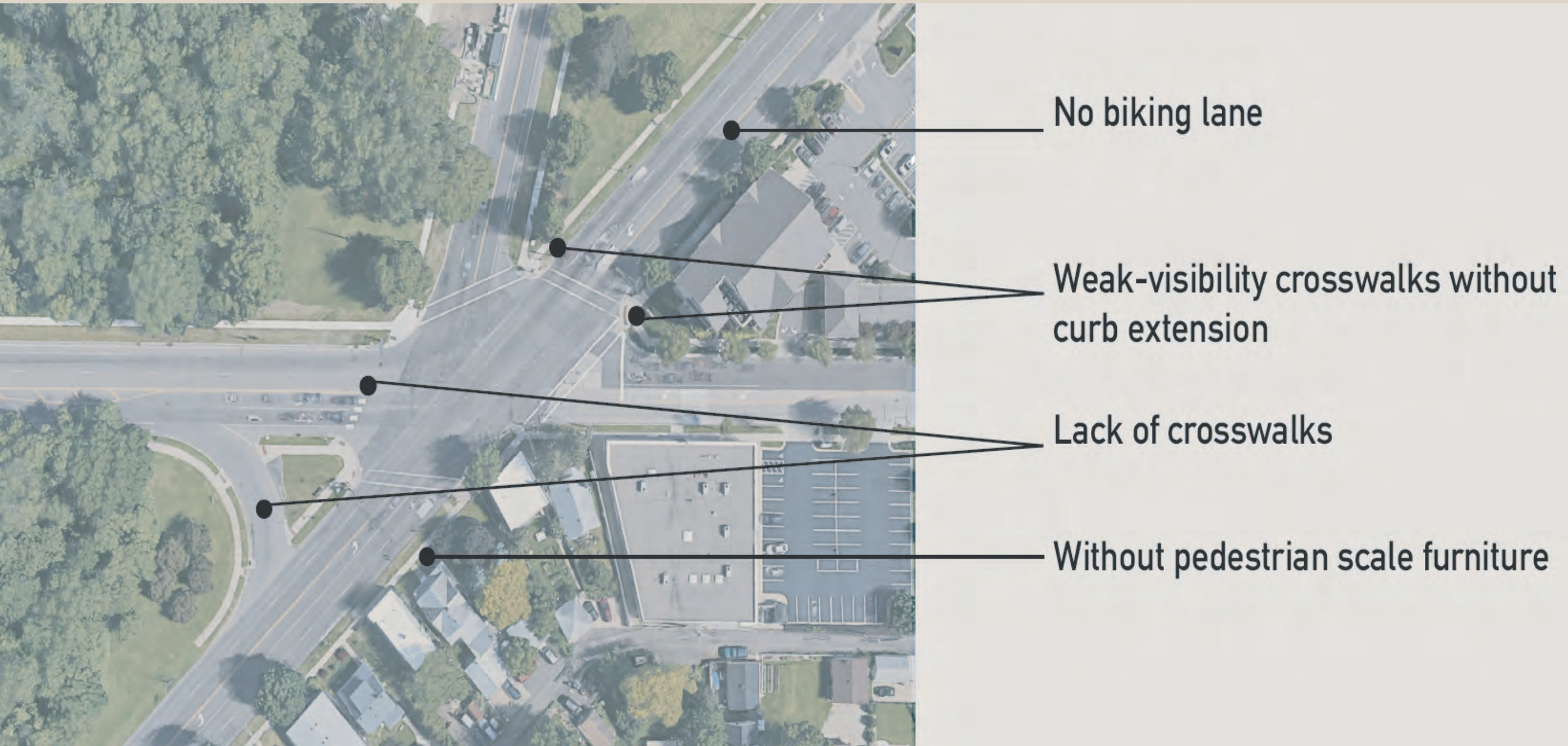
Crash Map Data for West 7th

Crashes occurred over the years 2016–2018, and involve both bicyclists and pedestrians traveling on or across West 7th. One-fifth (20%) of these accidents involved bicyclists, and the other 80% involved pedestrians.



Intersection Analysis: Unsafe Example

Montreal Existing Design



Design for Pedestrian Safety



Bump-Out

Benefits of Bump-Outs

- Improves safety for pedestrians, including children and the elderly
- Better visibility of pedestrians about to cross
- Shortens crossing distance
- Reduces right side passing by motorists
- Discourages vehicle speeding
- Bump-outs with trees and other plants provides shade and beautify the street



Look-markings & crosswalk repainting

Look-markings & crosswalk repainting

- Enhance visibility
- Enhance safety
- Beautify the street

Design For Pedestrian Safety



Pedestrian Scale lighting

- Better visibility of pedestrians
- Alerts drivers to the presence of pedestrians in an area.
- Improves nighttime security

Pedestrian scale lighting



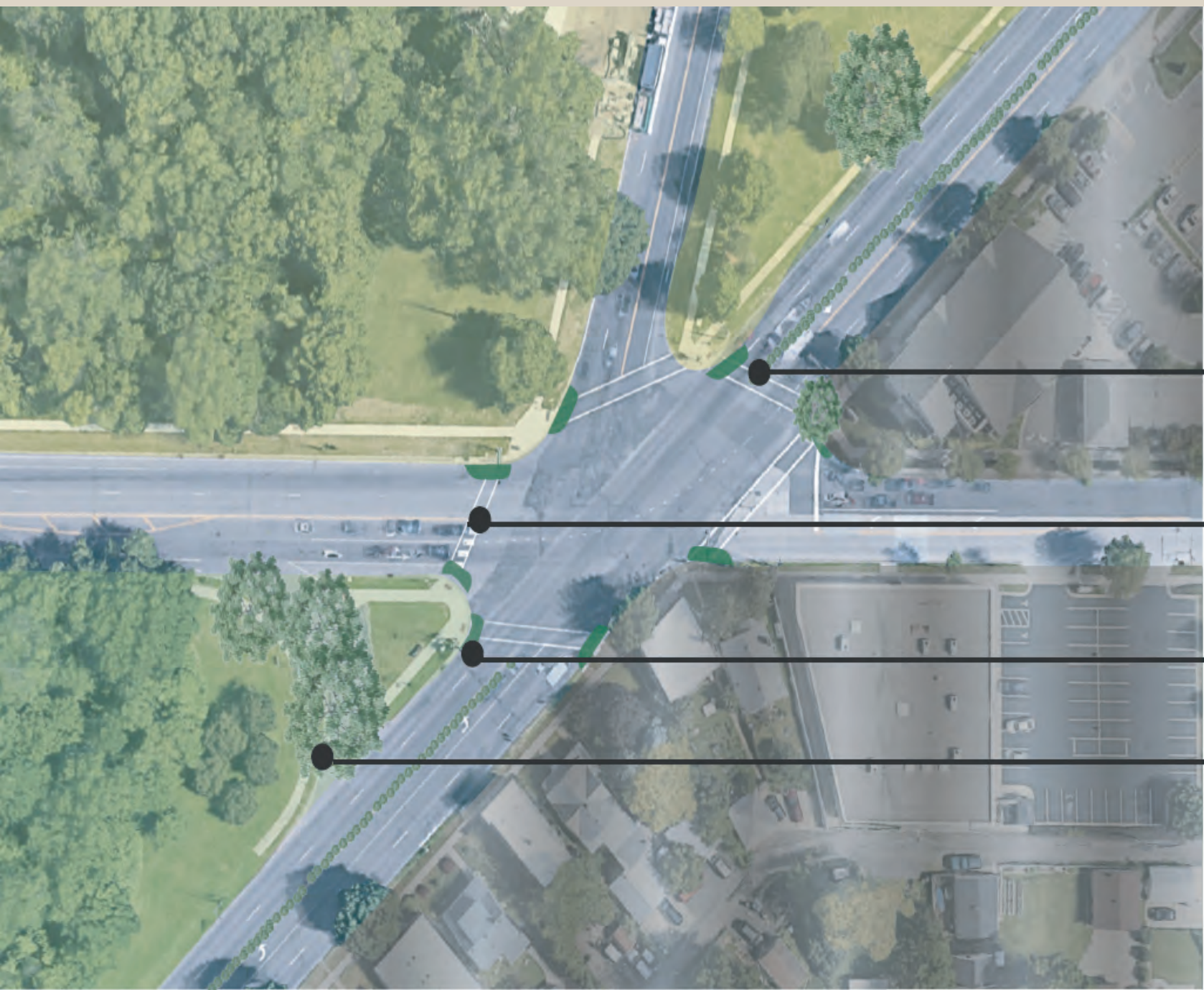
Raised median

- Slow vehicle speeds
- Provide space for street trees and other landscaping.
- Provide a refuge for pedestrians crossing the street.

Raised median

Safer Design

Montreal: Proposed Redesign



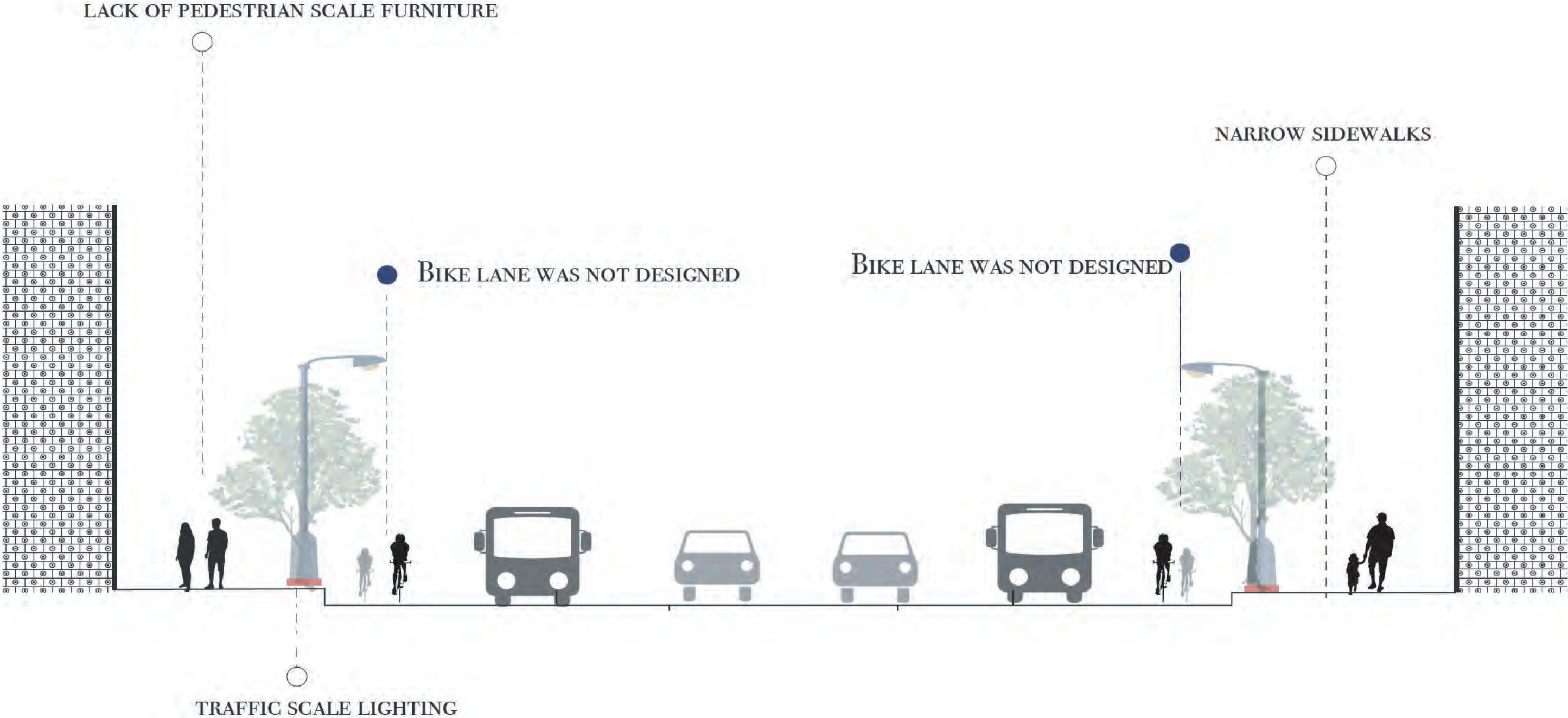
Biking lanes with raised median

Added crosswalk

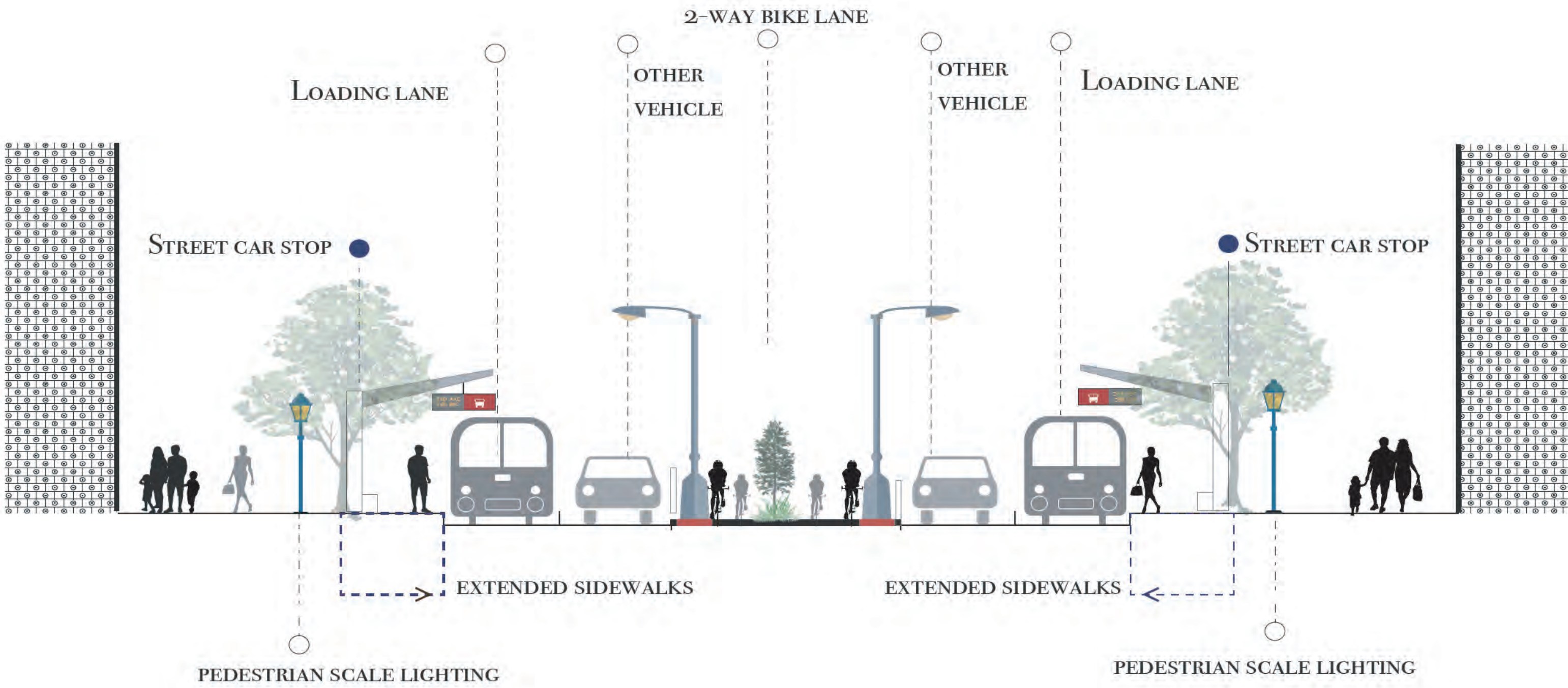
Bump-outs

Filled the corner with vegetations
improved the greenery

Section Diagrams: Existing Conditions



Section Diagrams: Proposed Redesign



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Final Design Proposals

West 7th Street
&
Randolph Avenue

*Brendan Broady, Leyla Dualeh,
Nathan Davies, Sophie Gallandat*

Contents	Pg
Introduction	77
Neighborhood & Site Context	78
The Intersection	80
Stop Proposals	81
The Pedestrian Experience	
Crosswalks & Connectivity	82
Lighting	83
Business & Community Needs	
Businesses & Parking	84
Creative Crosswalks	86
Short & Long Term Proposals	87

Behind the Designs: *Project Introduction*

After spending the first half of the semester familiarizing ourselves with the Randolph-West 7th site & neighborhood context, we decided to focus our design proposals on small, tangible improvements to the space that would have the greatest results for current residents, business owners & future users of the site. Given the historical significance of most of the sites buildings, coupled with the concentration of small-businesses lining both sides of west 7th, it seemed most practical, in the context of transit-oriented design, to look at adjustments to the current street scape rather than potential development.

The overarching question we found ourselves wondering was; what can we, as designers, do to ensure that future streetcar implementation is beneficial to this community of residents and businesses?

Our goals were to make certain that the community does not feel as if they are being displaced or ignored, supporting small-businesses during and post-construction, especially in terms of parking needs, and finally, improving the safety and accessibility of the site and surrounding areas for all pedestrian users.

The following pages consist of a few practical design proposals we came up with in hopes of working towards these goals, and though they are simplistic, we believe they would greatly empower all future users of the Randolph-West 7th site.

Neighborhood Context

The Randolph- West 7th neighborhood consists of single family homes, small local businesses and multi use buildings. It has prevalent historical character, and is beloved by residents. Much of the area is undergoing adaptive reuse and redevelopment of its industrial spaces.



James, Daly & W. 7 intersection, notice the full capacity of street parking and classic 2 story, multi use warehouse buildings.



Randolph, Osceola & W. 7th intersection showcasing important neighborhood features such as connection the bluff, the fire department, medical center & classic building structures.

Schmidt Brewery is another important feature of the community as it is a staple of West 7th history and culture. The Schmidt sign is a landmark visible from almost anywhere in the neighborhood.

The Site: Mapping Land Use

General Site Characteristics

- Primarily hard scape makeup on 7th street itself due to the local business corridor,
- Mature street trees along the boulevards between the sidewalk and the street.
- Wide sidewalks leading up to 2-3 story historic warehouse buildings
- Local business corridor, restaurants & shops, as well as arts and entertainment.
- Frequent J-walking across W 7th street

Site Composition:

- Residential single family homes comprise most of the area north of West 7th,
- Local businesses (shops, restaurants, bars, theaters...) as well as institutional buildings, line the core of West 7th street itself
- South of which is primarily industrial lots and buildings



The Intersection

The intersection of West 7th Street and Randolph Avenue is notorious for being chaotic and dangerous to both pedestrians and vehicles. This junction combines Osceola Avenue, West 7th Street, and Randolph Avenue, creating a very complex six way intersection. Some of the key issues with this intersection include faded crosswalks, poor lighting, and awkwardly placed traffic lights. The poor design of the current crosswalks also encourage jaywalking, which can be very dangerous to both pedestrians and oncoming traffic. The surrounding area is made up of restaurants, stores, residences, a fire station, and medical building.



Street Car Stop Proposals (right) >

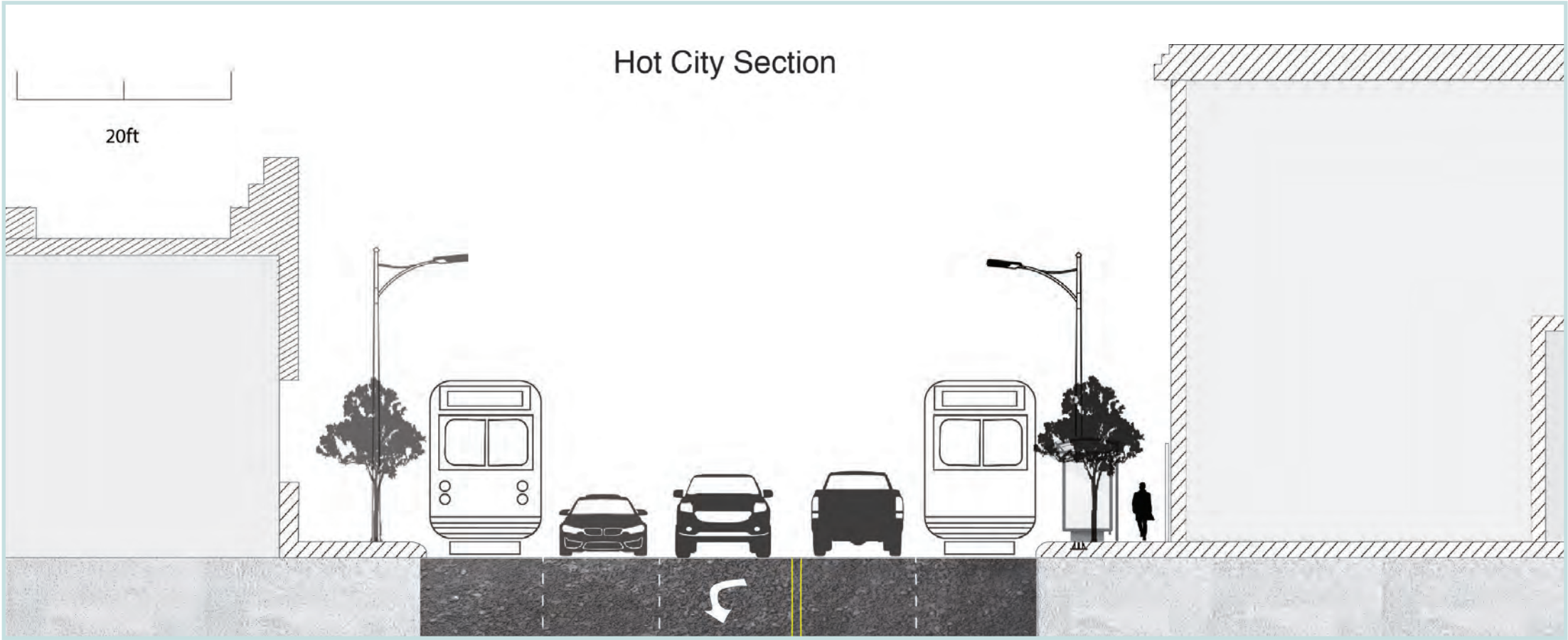
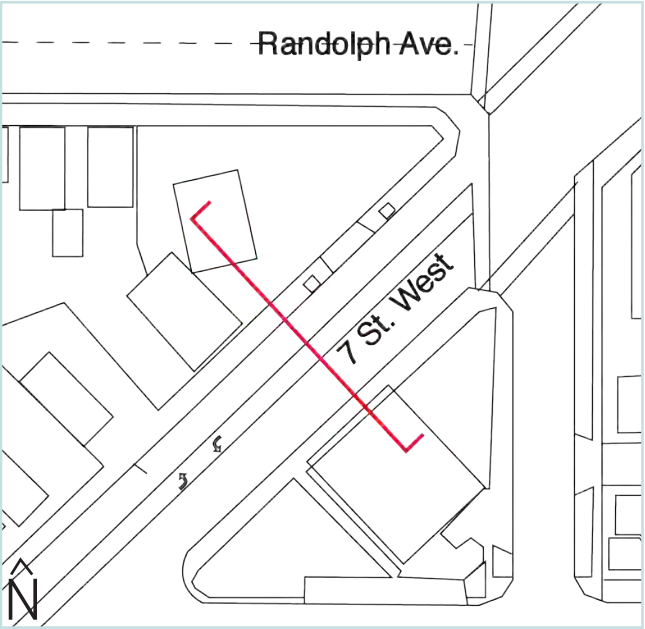
Hot City

Our westbound streetcar stop will be located near the Hot City restaurant on West 7th Street. We chose this specific location for its spacious parking lot area and wide sidewalk length. It is also far enough from the intersection where it will not cause any issues with visibility for cars and pedestrians.

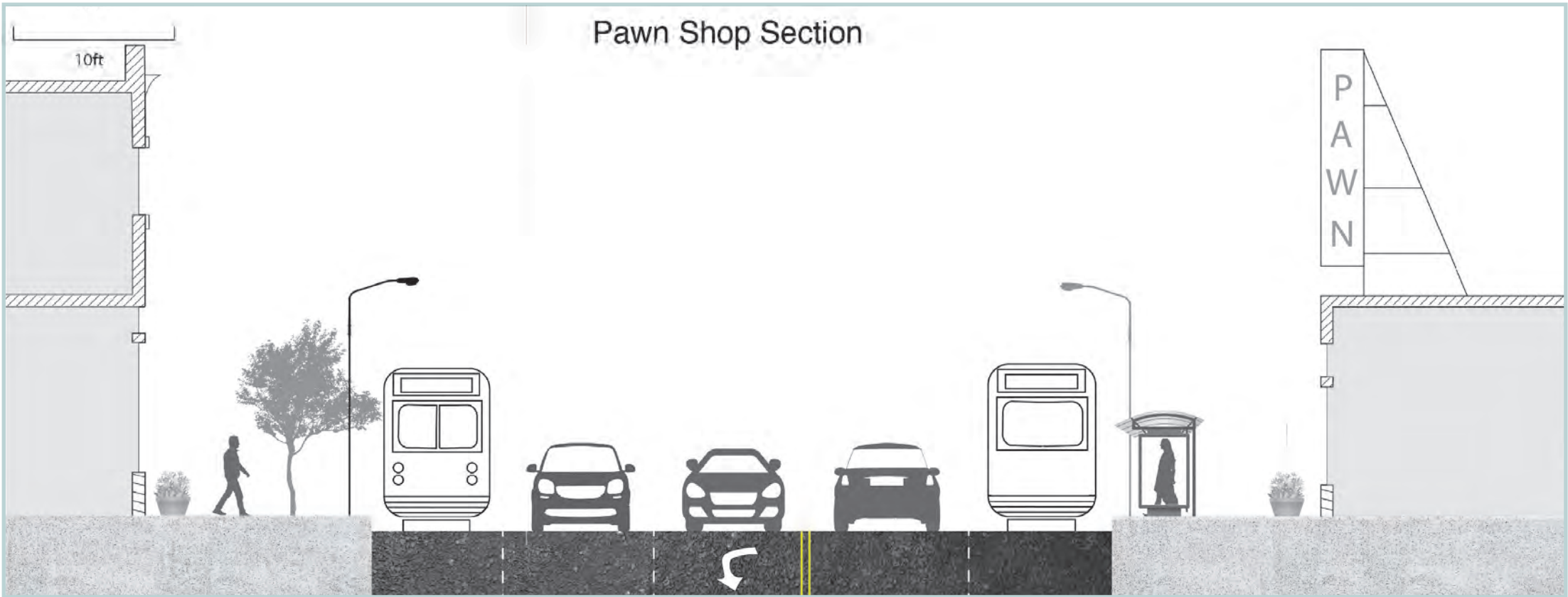
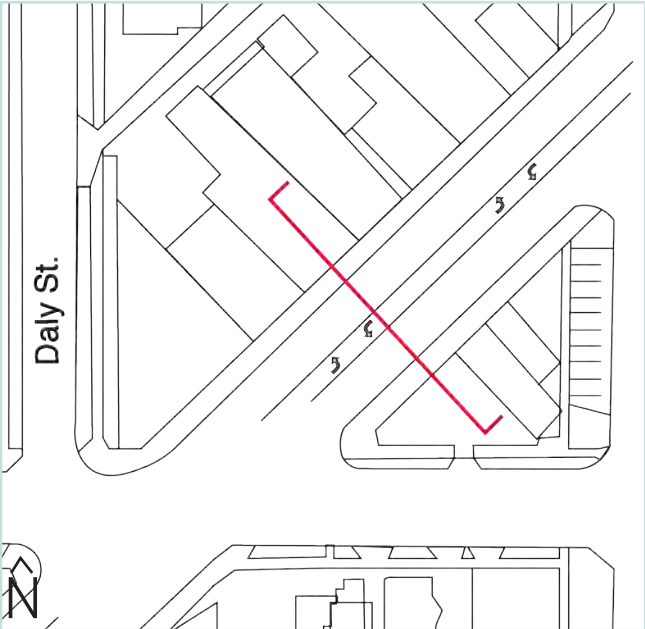
Pawn Shop

Our eastbound streetcar stop is going to be placed near Best Pawn shop on West 7th Street. The pawn shop stop is located about a block away from the Randolph and West 7th intersection. We decided to push the stop away from the actual intersection for a number of reasons. The Randolph/West 7th intersection is already very chaotic and the addition of a streetcar stop would make things even more confusing for vehicles and pedestrians. There is also a fire station and medical center located on the intersection, and adding a streetcar stop here would negatively affect the emergency vehicles that enter/exit the buildings.

Hot City
(West Bound)



Pawn Shop
(East Bound)

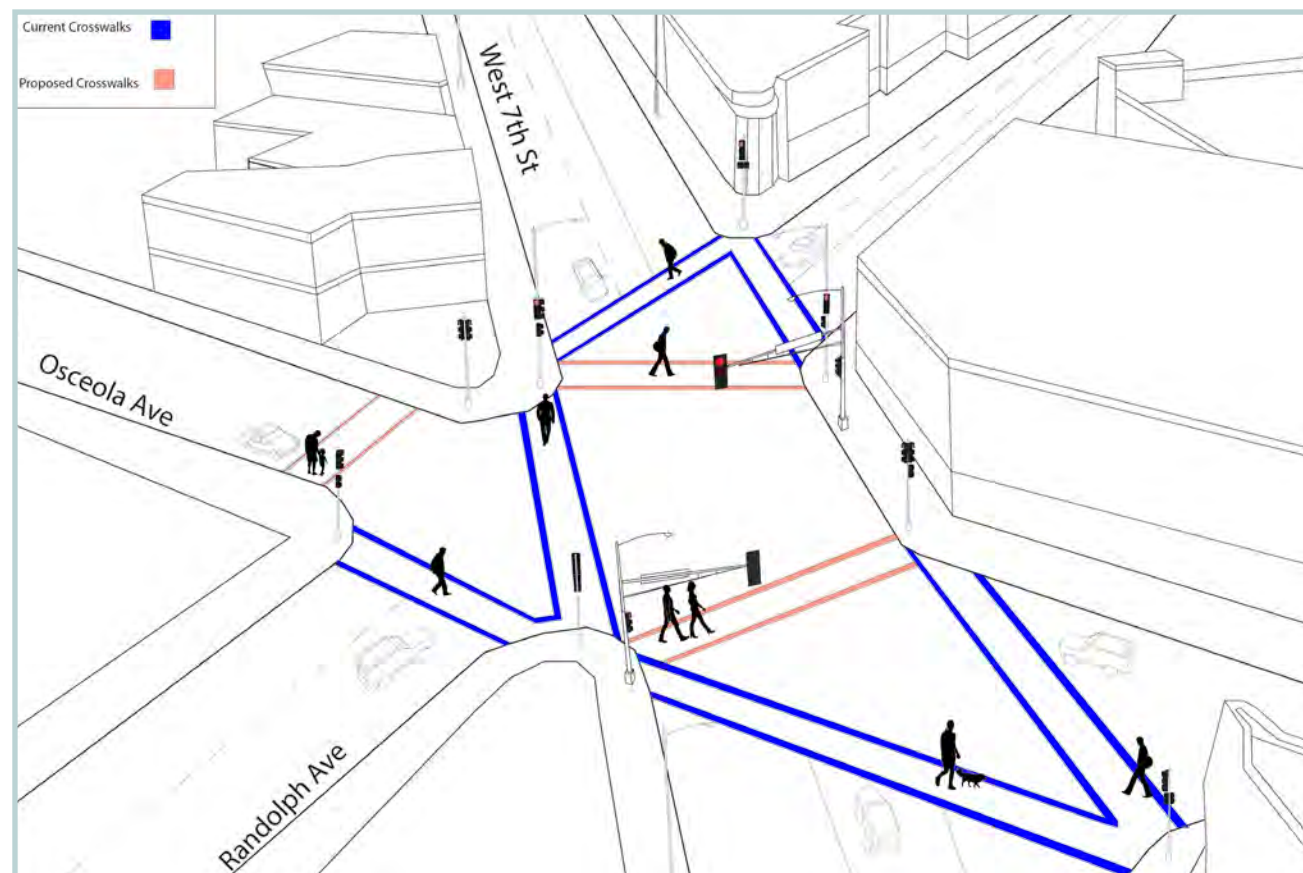


The Pedestrian Experience

Crosswalks and Connectivity

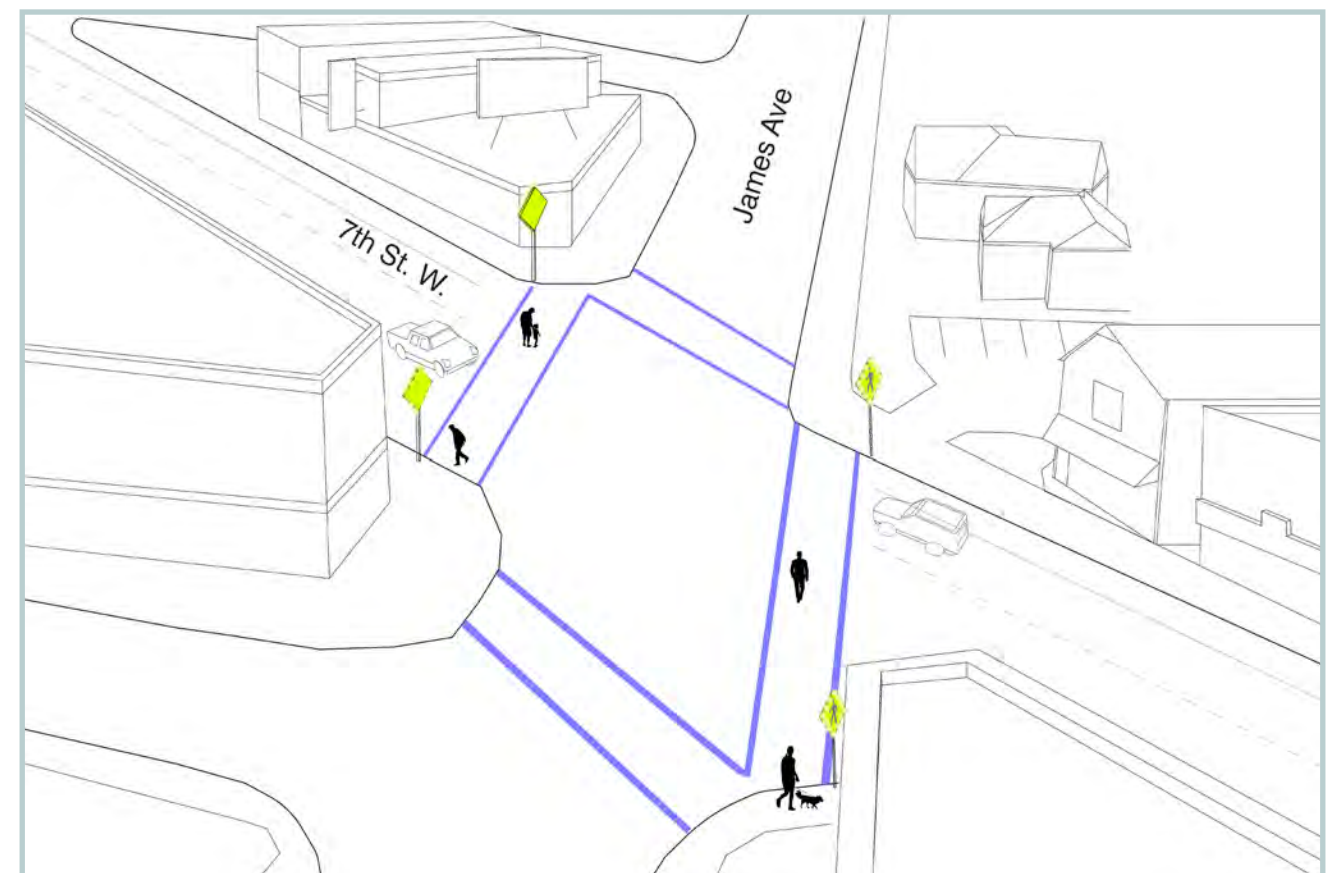
Current crosswalk conditions are less than optimal, as many have worn away and some are missing completely. Additionally, the current crosswalks and stop lights at the Randolph & W 7th Street, are ineffective in providing safe crossings for pedestrians, as many require multiple crossings, and the no turn on red conditions lead to vehicular speeding through yellow lights and turning on green when the walk sign is on for pedestrians. Vehicular traffic does not stop for pedestrians at any unmarked crosswalk, and crossing West 7th at an intersection such as James is a time consuming and dangerous venture, though it happens frequently.

W 7th St & Randolph Ave & S Osceola Ave



We propose implementing a *Barnes Dance* at the intersection, adding 3 new crosswalks. This traffic signal operation allows pedestrians to cross in all directions while stopping vehicular traffic from all directions.

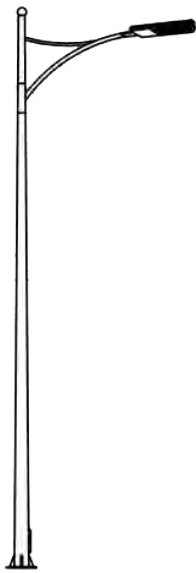
W 7th St & S James St & S Osceola Ave




Current Conditions: there are no marked crosswalks, constant vehicular traffic & rarely yield to pedestrians crossing W 7th. We propose (re)painting new crosswalks & implementing flashing pedestrian walk signs facing W. 7th.

The Pedestrian Experience

Lighting



large scale



small scale

Very tall street lights primarily for vehicular convenience & navigation.

Small scale street lamps provide light for pedestrians.



Lighting on the site currently functions as a limiting factor for pedestrian accessibility and mobility! This is significant when looking at the scarcity of winter daylight and what that could mean for street car users.

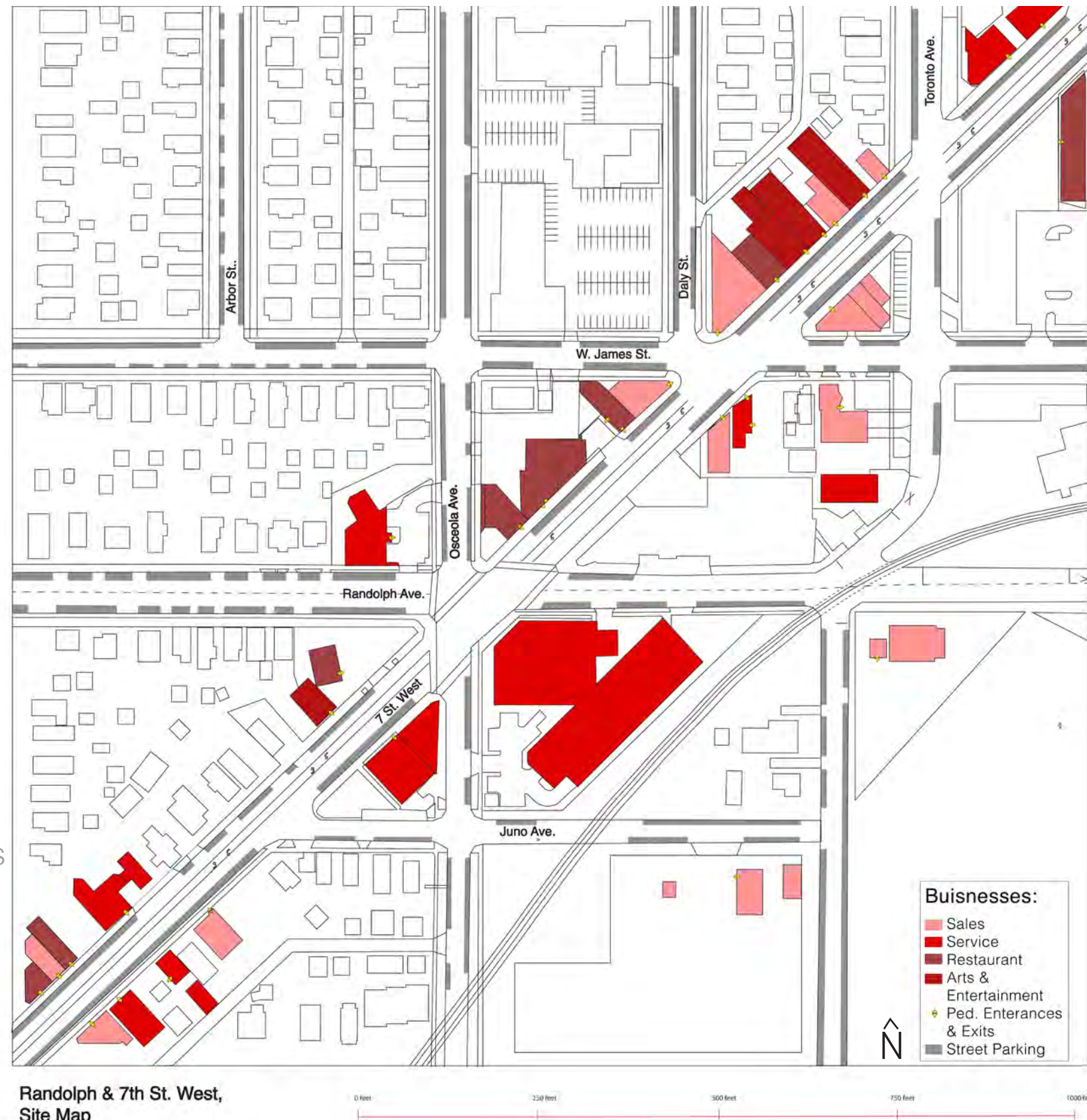
We propose adding small scale lighting units to surrounding pedestrian walking areas in need, providing a safe connection West 7th St.

Business & Community Needs

Local Business Needs & Impacts

Small Businesses & Street Parking

Overall Business needs and concerns are loss of street parking, street car construction consequences to operation, potential for loans & further detailed analysis of loan precedence, cost of rental and property taxes after streetcar is implemented.

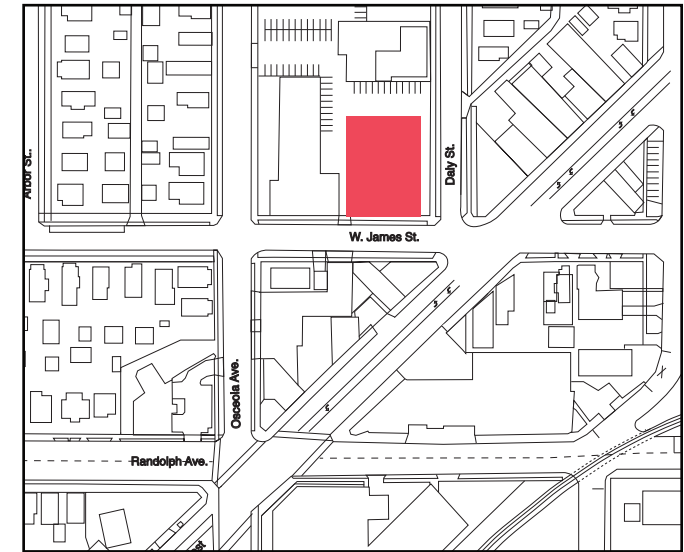


The businesses of West 7th and Randolph makeup approximately a 4 block strip along both sides of 7th street. These businesses include art & gift shops, second-hand shops, restaurants, bars, florists, auto services, theaters & showrooms & a new indoor market place. Almost all of these businesses are considered local and small, and many owners live in the community. A large portion of these businesses depend on the few available street parking spots for their customers. All of the businesses are in need of increased foot traffic from outside of the community and demand the same improvements for walk ability and safety as for the pedestrians.

Business & Community Needs

Parking Ramp Proposal

We propose building a small 2-story parking ramp on the current parking lot site at James & Daly to compensate for the displacement of street parking for both residents & businesses. This ramp would match the aesthetics of the historic buildings of the area, as a 2 story brick structure. Additional considerations include making the ramp into a multi-use space, where the bottom level could perhaps be a community space.



Business & Community Needs

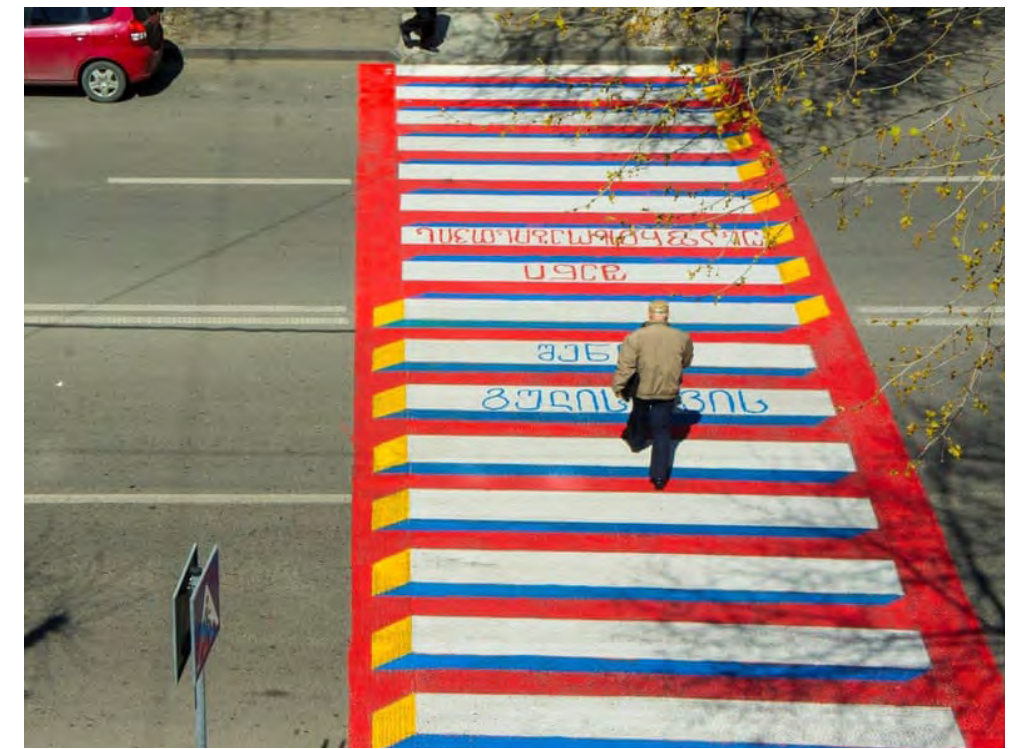
Community Preservation & Involvement: Creative Crosswalks

Creative crosswalks have been shown to slow down vehicular traffic and empower pedestrians, as their eye catching designs capture the attention of drivers, shifting their focus to the crossings. They are also great ways of showcasing the unique features of an area, as historical and cultural identities can be incorporated into the designs. This is an important concept when looking at maintaining the salient features of this communities identity. The community is made up of a variety of local artists and a plethora of creativity, which would allow this project to remain at a local scale. As we look at moving forward with the redesign of their main corridor, its crucial that the community is able to feel like this is still their home and to be able to control the narrative as the street car begins to bring in newcomers and tourists.



(above) Precedence: 27th ave & Franklin Minneapolis, 2008 Seward Redesign: Trial cross walk design printed on mylar. Work done by community volunteers, ROLU & City Desk Studio

A Crosswalk on Ocean Avenue at Broadway in Santa Monica, California (below)

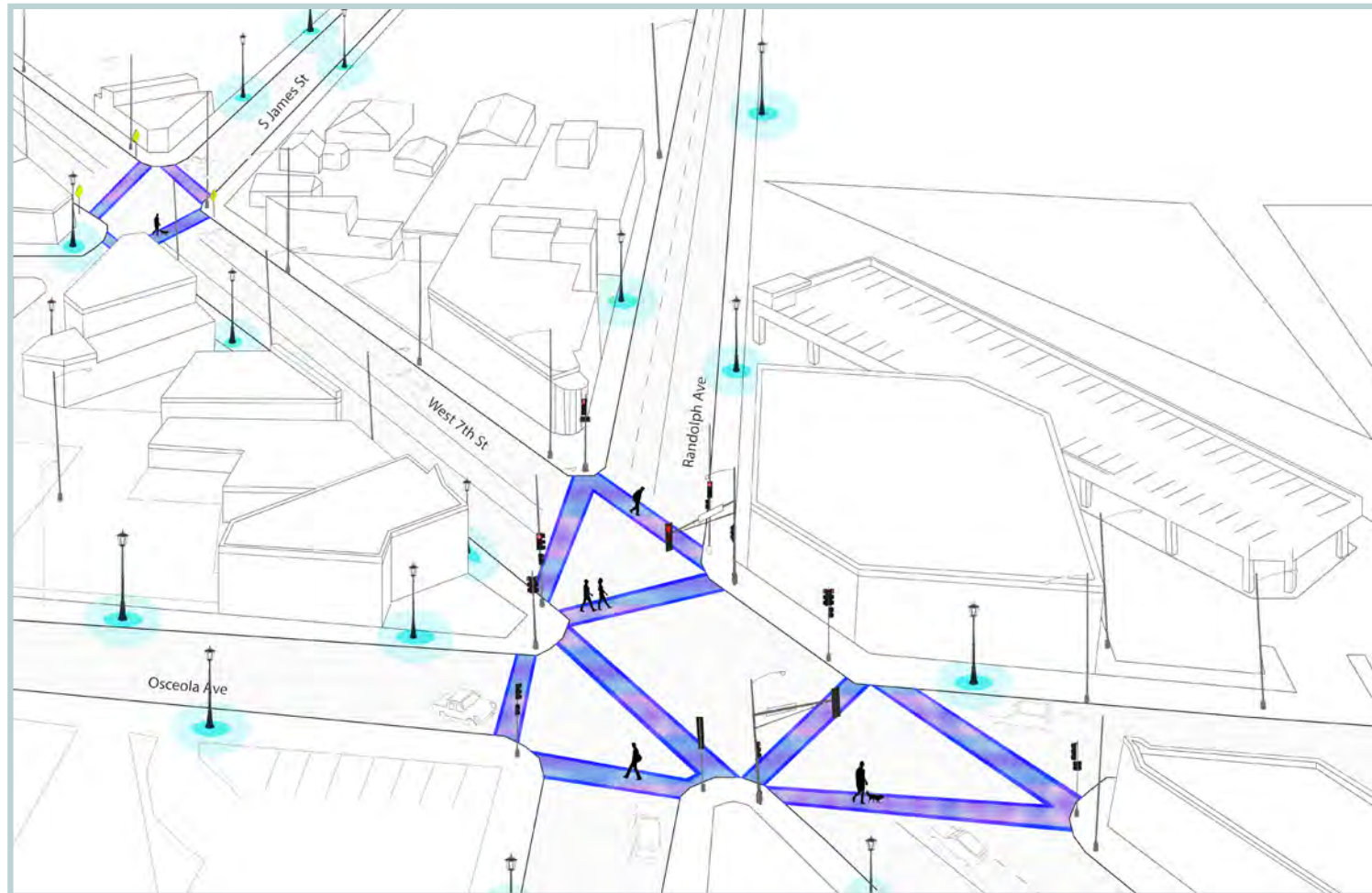


(above) This Crosswalk was painted as a joint effort between Art students and public employees in Tbilisi, Georgia. The crosswalk reads " For your safety" in the Georgian language. (2016)

We propose a trial installation of creative crosswalks at the sites outlined in the crosswalk section, such as in the Seward Neighborhood shown in the upper left, in hopes of someday completing a permanent creative crosswalk installation.

Proposals

Short Term



Proposals:

- Barnes Dance & Additional Crosswalks at Randolph & West 7th & Osceola Ave
- Repainting Crosswalks & installing pedestrian walk sign at James & West 7th
- Additional small scale lighting !
- Community Creative Crosswalk Project

Long Term



Proposals:

- Street car stops away from the intersection of 7th and Randolph- at the Pawn Shop and Goodies Hot City
- Parking ramp structure location and scale on the current parking lot site at James & Daly

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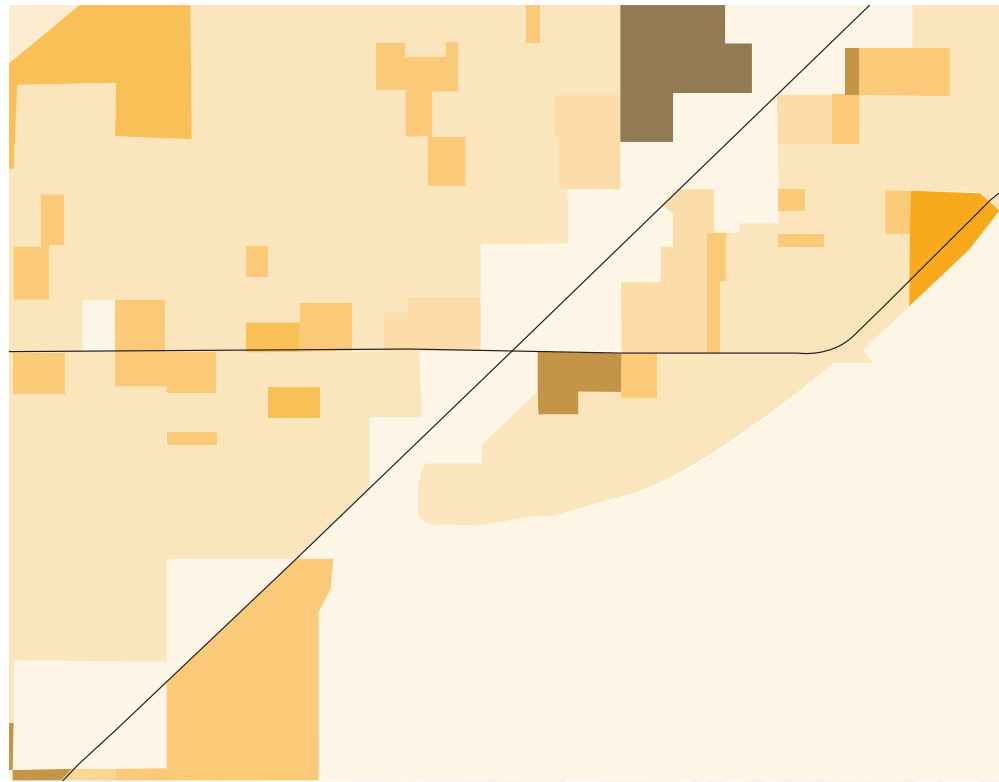


St Clair Avenue

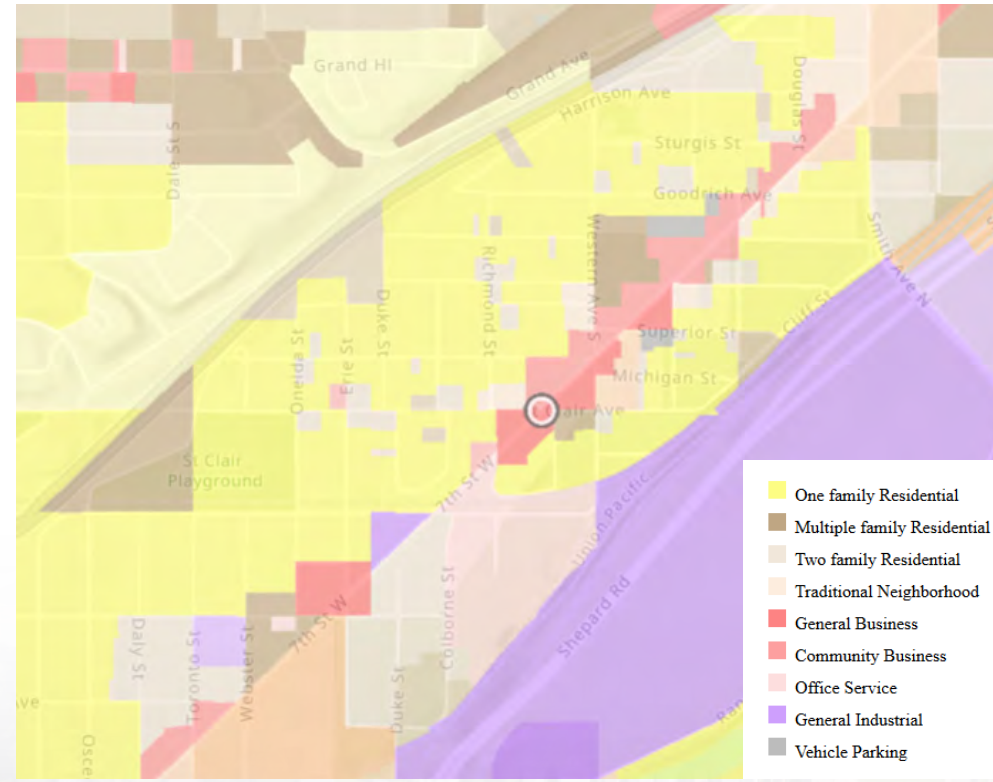
Jacob Bonde, Dani Maas, Michael Talerico, Sophy Fitzcollins

WEST 7TH STREET

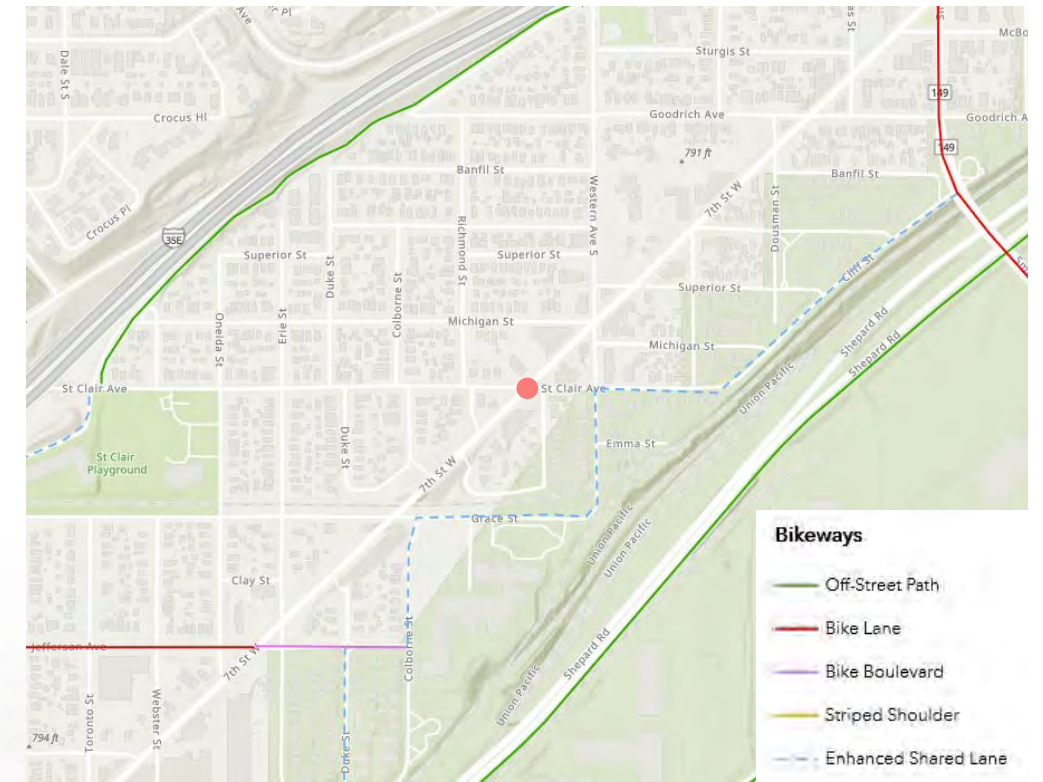
Our exploration of the West 7th Street and St Clair Avenue intersection involved analyzing existing vehicular and pedestrian traffic, housing density, and local businesses. Through this we created a plan to **decrease vehicular congestion** and incorporate a vegetated, pedestrian plaza and **multi-use complex** to create a safer, more welcoming streetcar stop.



Housing Density



Zoning

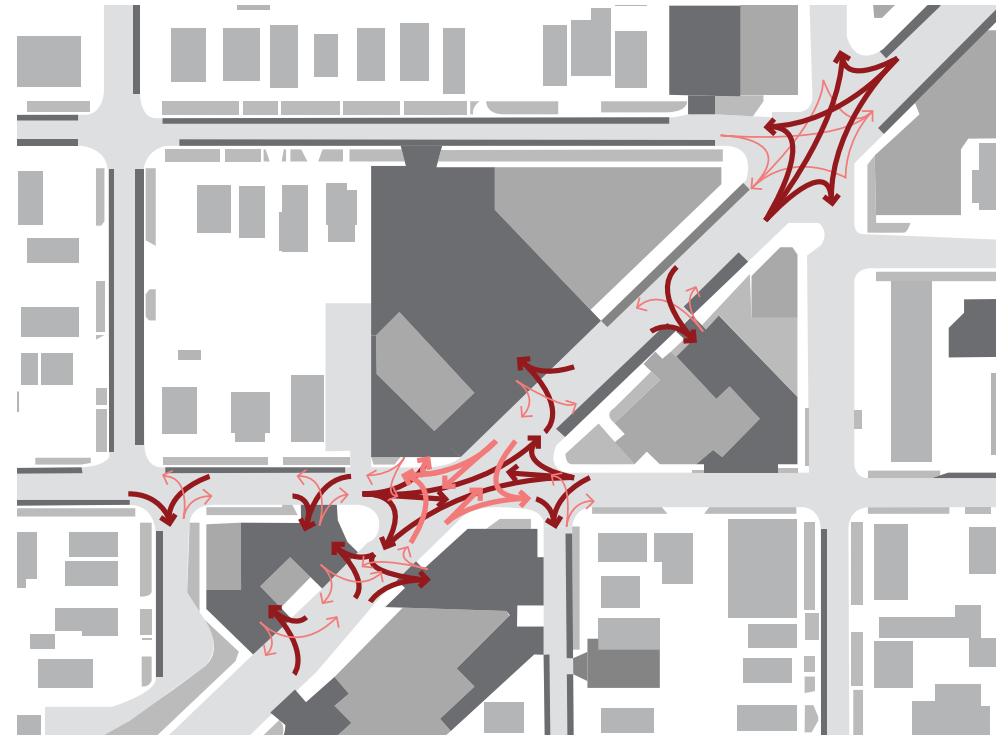


Bike Lanes



Surrounding Context

Our intersection is surrounded by a largely single-family residential neighborhood, and St Clair also provides a direct connection to I-35E as well as several nearby bike paths and parks. We wanted to preserve these connections and potentially build upon them in our project proposal to maintain the current neighborhood dynamic.



Vehicle Circulation

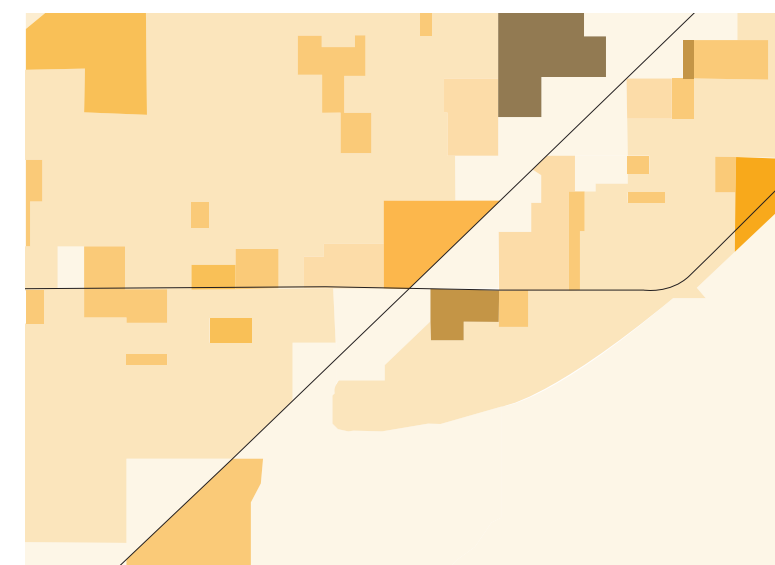
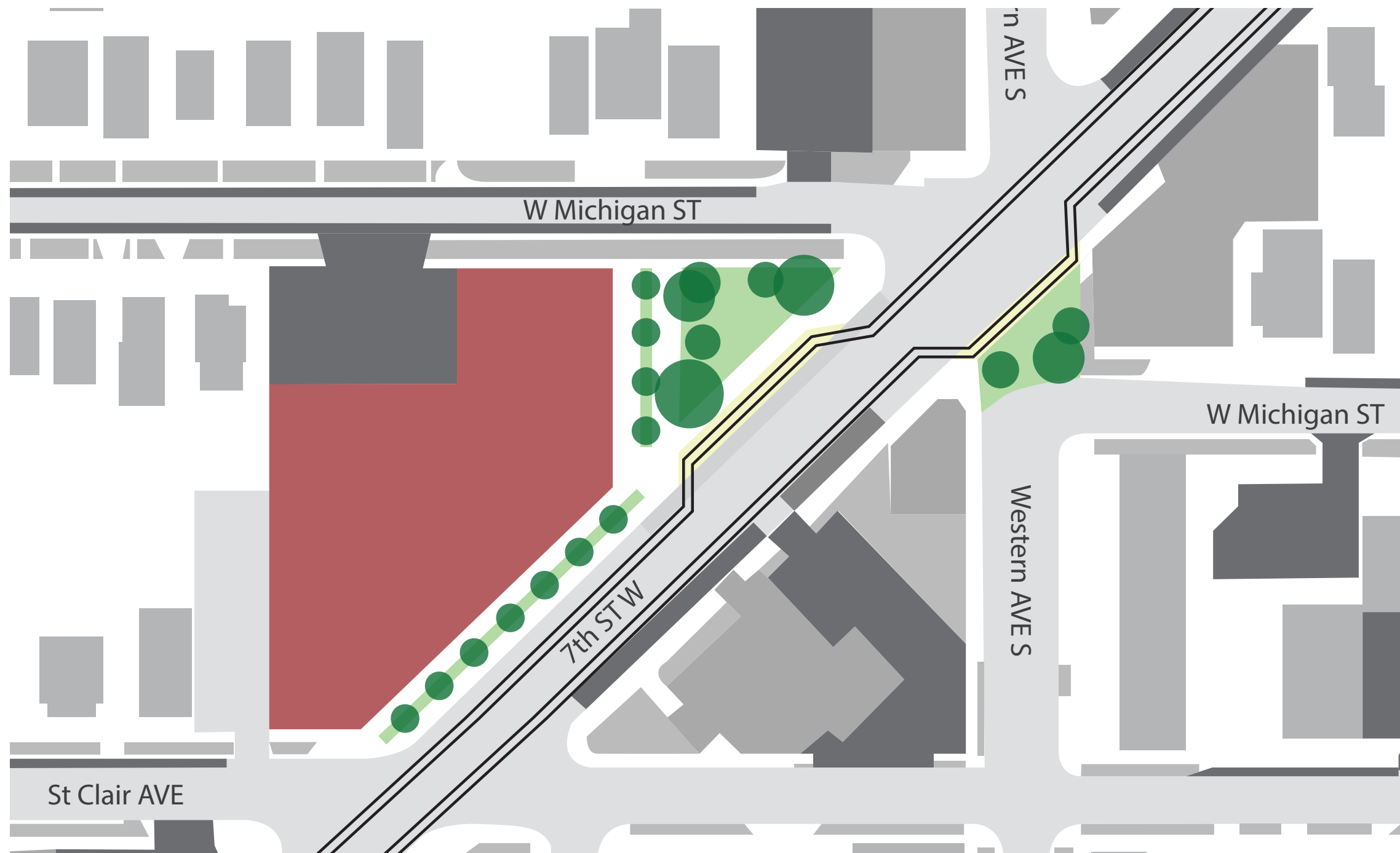


Pedestrian Circulation

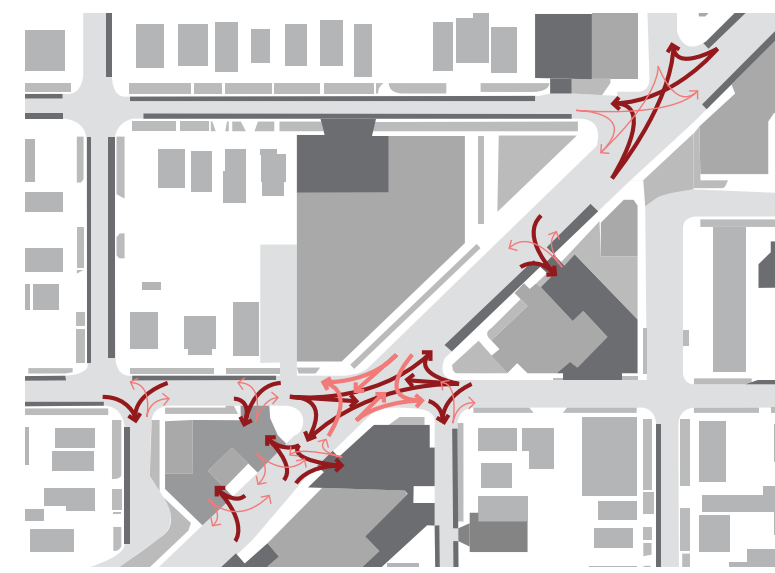
The Existing Intersection

Numerous surface parking lots contribute to vehicular congestion for both West 7th and St Clair (two already highly trafficked thoroughfares), as well as emphasize the stark lack of green space compared to the surrounding residential context.

A grocery store, liquor store, and gas station dominate two corners of the intersection, providing crucial services to the immediate community and drawing a lot of vehicular and pedestrian traffic to the area.



New Housing Density



New Vehicle Circulation



New Pedestrian Circulation

Opportunities for Redevelopment

Moving the streetcar stop away from the St Clair and W 7th intersection and reducing surface parking lots would diminish vehicular congestion immediately around the intersection, while opening up opportunities for pocket parks, pedestrian plazas, and a multi-use complex that could offer combined grocery, retail, and residential space. This redevelopment would both maintain and build upon the services currently being met by existing businesses.



Mississippi Market on Selby
14,634 sqft
46 parking spots
Limited street parking



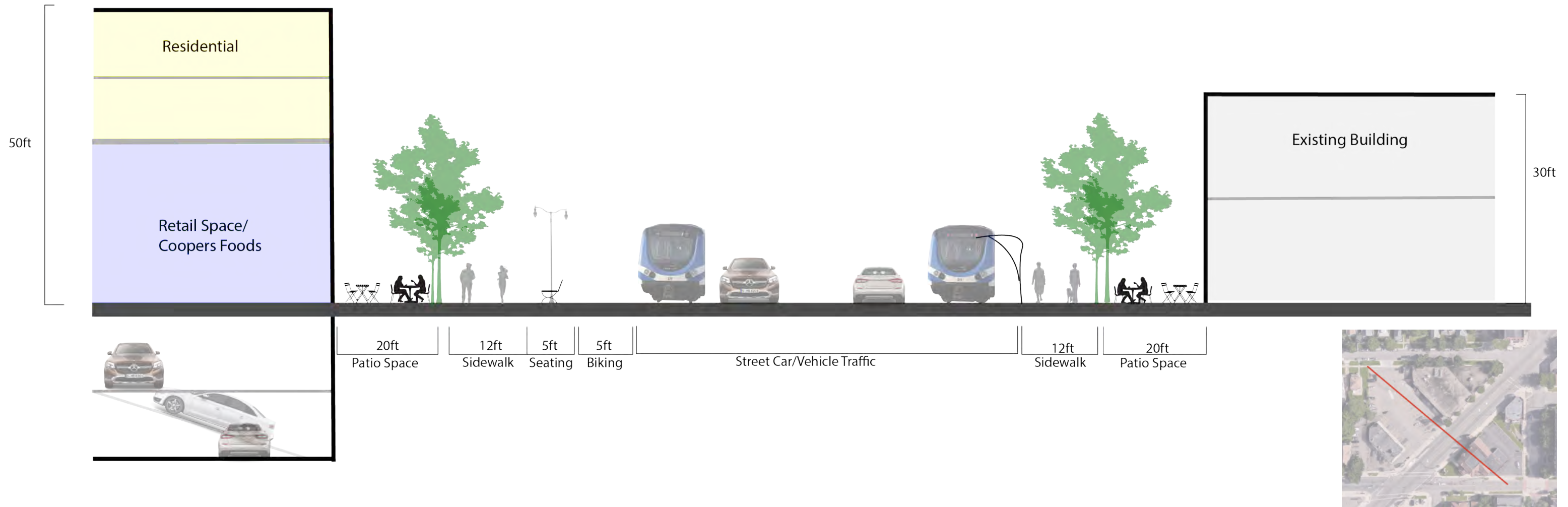
Trader Joe's on Lexington
15,762 sqft
22 parking spots
Adjacent lot offers additional 24 spots



Mississippi Market on West 7th
14,764 sqft
51 parking spots
Street parking offers additional spots

Parking Precedents

Looking at the parking lots near other local grocery stores, it seems a new mixed commercial and residential complex at our site might not need a large surface parking lot, especially considering there are several neighboring lots and street parking opportunities already in the area. The convenience of the nearby streetcar stop would also hopefully encourage public transportation over vehicle use, minimizing the need for additional parking spaces. However, an above or below ground parking ram could be incorporated to fulfill any remaining parking needs.



Proposed Multi-Use Complex

32,000 sqft + 150 parking spots in underground (or above-ground) ramp

Our proposed complex is three stories tall, with mixed commercial and grocery space on the ground level, and residential space above. A smaller complex fits in well with the immediate context of 1-story houses and 2 to 3-story businesses, but an additional 1 or 2 floors could be added if above rather than below-ground parking is pursued.



Pedestrian Plaza

Integrating a plaza and pocket park into the stop design, and providing space within the multi-use complex for local businesses and restaurants will create a community gathering space that will help revitalize the W 7th corridor, transforming this intersection into a central hub for the surrounding neighborhood.



View 1: Approach



View 2: Streetcar Stop



View 3: Pocket Park

GRAND AVE & WEST 7

St. Paul, Minnesota
ARCH 3250/LA 3002

PROPOSED STREETCAR STOP



Marin Forey, Mara Hitt, Jack Scherkenbach

FIRST-HALF PROPOSAL.....101

- Scope of work
- Context
- Site Conditions
- Section
- Section
- Improvements
- Track Plan

SECOND-HALF PROPOSAL.....110

- Scope of Work

LARGE SCALE.....111

- Description
- Maps

MEDIUM SCALE.....115

- Description
- Traffic Flow
- Sections
- Precedents

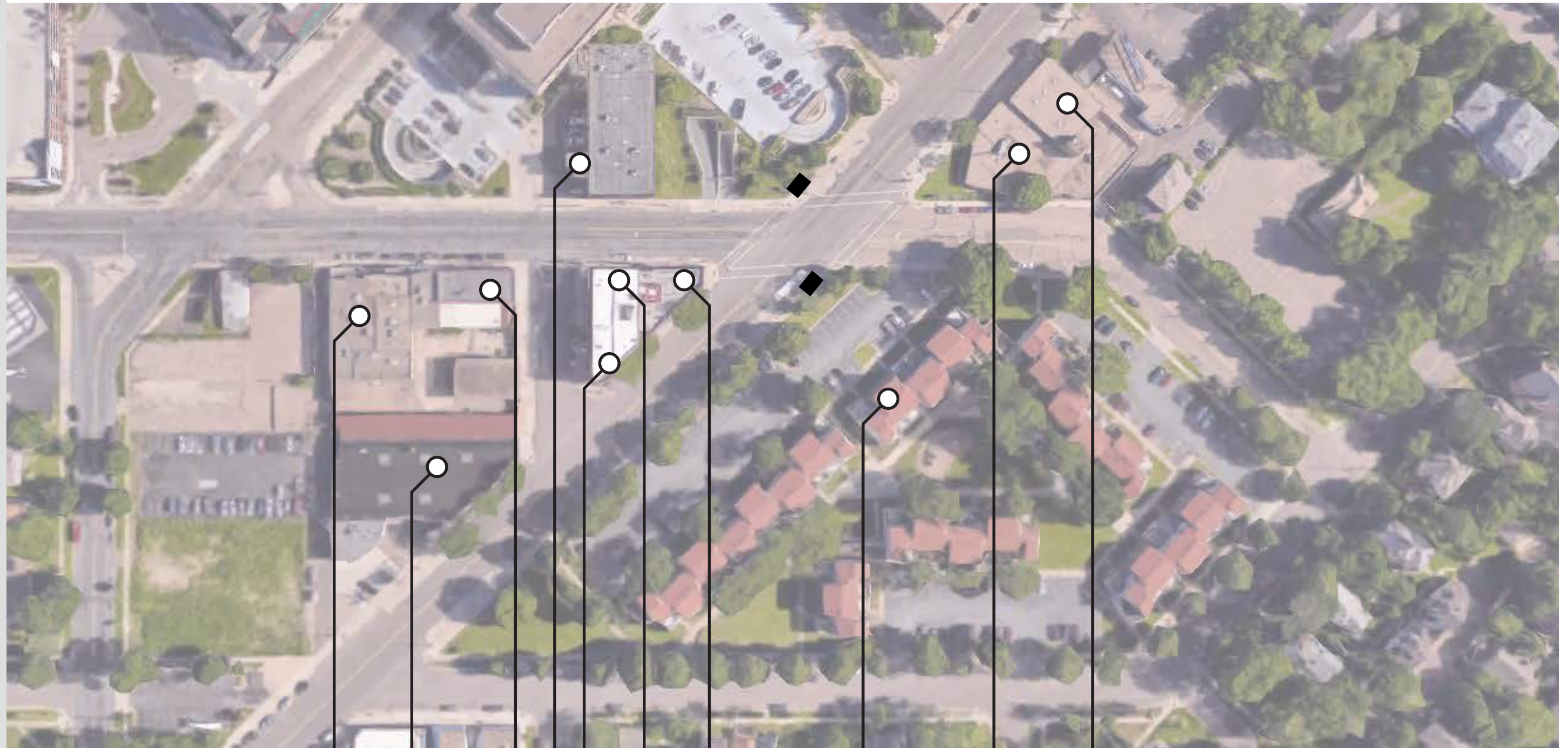
SMALL SCALE.....121

- Description
- Plans
- Woonerf Sections
- Renderings
- Stop Sections

FIRST HALF PROPOSAL

SCOPE OF WORK

In the first phase of our project, we approached our streetcar stop as a way to improve the intersection and **activate the space**. We have been particularly interested in accessibility, walkability, different modes of transportation, creating a healthy environment for the local businesses, and integrating the vibrant history and culture of St. Paul into our site. To do this, we looked at the **greater connections** of our site, experimented with ways to increase all **user safety** and walkability, and have designed ways to create a sense of place and celebrate St. Paul.



Residence Inn

Bonfe's
Auto
Service

St. Paul's First Fire Station

Children's and United Hospital

Scout

Cafe Astoria

Grand 7

Sherman-Forbes Housing

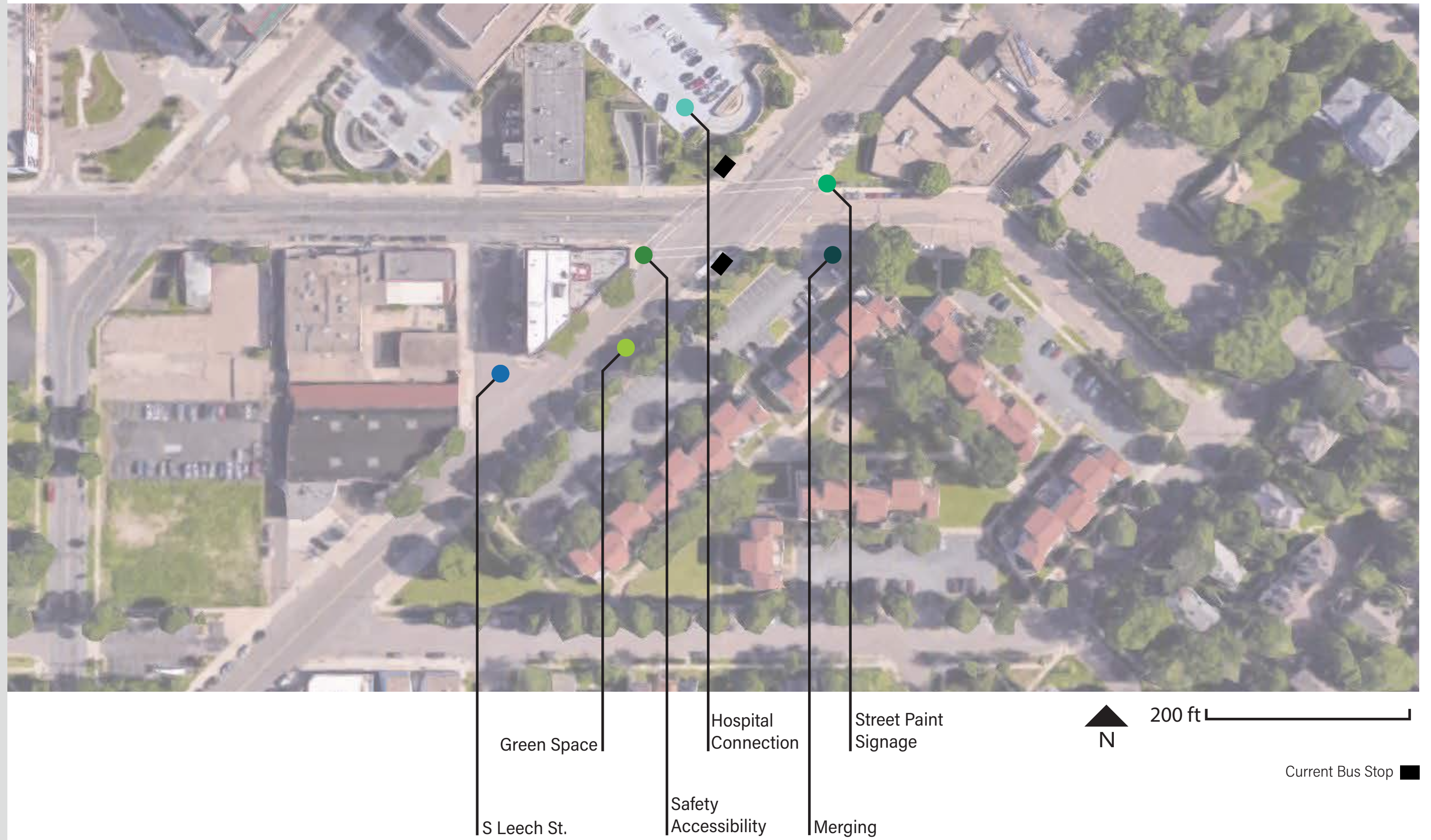
EMS Training Academy

St Croix Cleaners



200 ft

Current Bus Stop





Hospital Connection

The intersection is disconnected from the hospital site due to parking, a wall, and underused green space. This space should be used as an important pedestrian connection between the hospital complex and West 7th.



Merging

Many of the parking lots in the area cause unsafe merging conditions as drivers attempt to merge into traffic right at the intersection. This can be alleviated by redesigning the surrounding lots.



Street Paint & Signage

Due to the angle of the street and small signs, many of the street signs are difficult to read. The street paint is corroded and very basic. These issues contribute to the lack of safety on the street for drivers and pedestrians. The street paint and signage can help make the street much safer with an updated design.



Safety & Accessibility

Long crosswalks, narrow, dilapidated sidewalks, and lack of protection from the street makes the intersection hostile to pedestrians. Redesigning the way pedestrians interact with the street will help to increase safety and accessibility.



Green Space

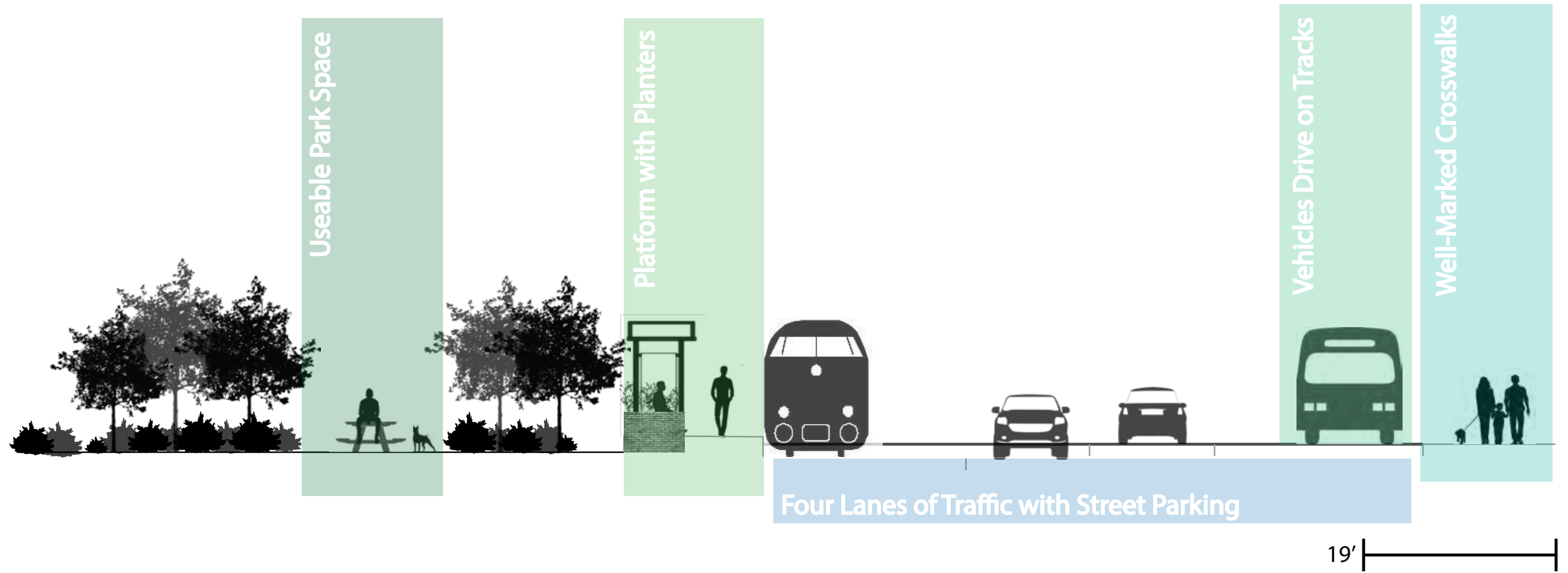
Unfriendly landscaping off of the hospital and apartment site make for underutilized green space. These spaces can be activated into beautiful and useful areas.



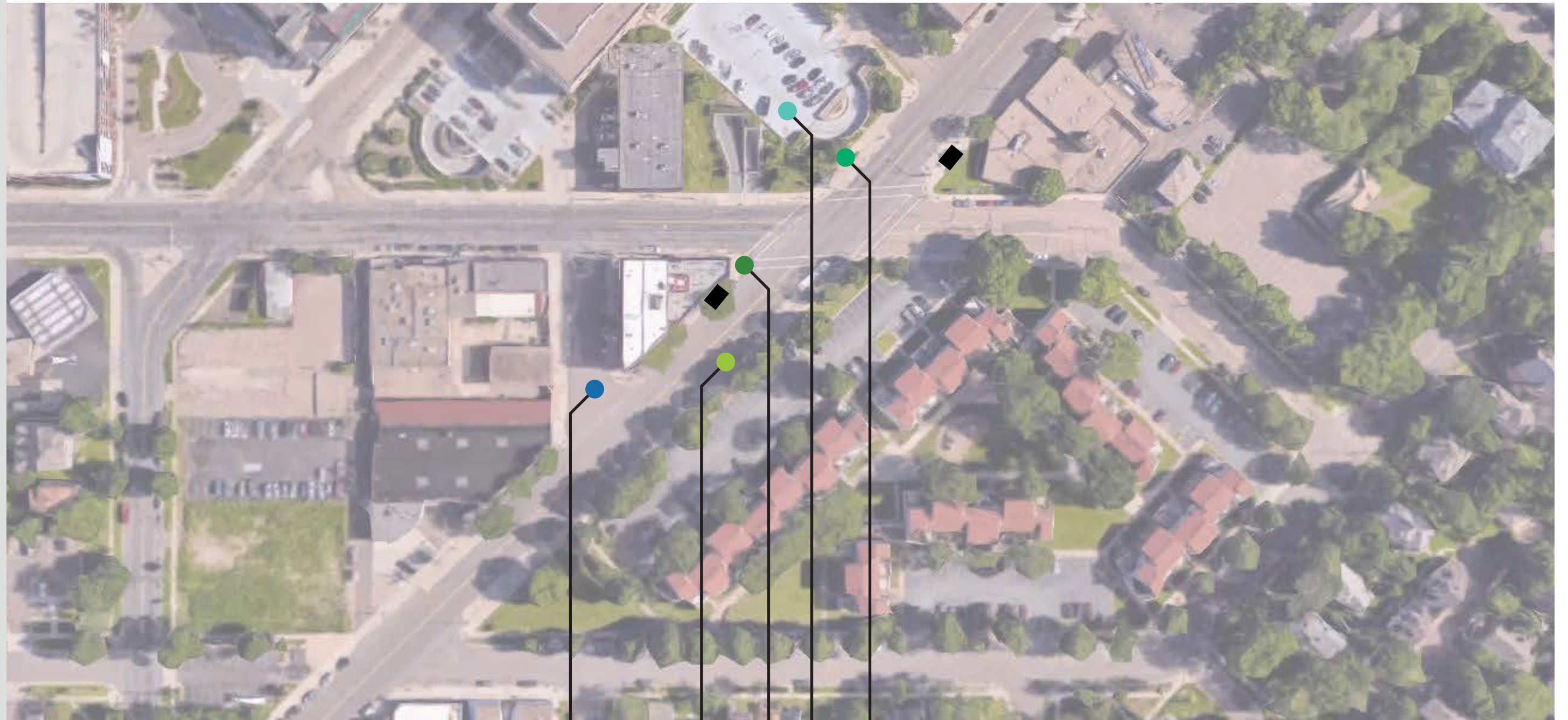
S Leech St.

S Leech Street is a small street running parallel to Grand Avenue. It is currently being used by drivers to cut through the intersection, causing more dangerous driving as users attempt to turn and merge. This space may be better utilized by⁸ rethinking how this street can serve the area.





PROPOSAL: IMPROVEMENTS



Woonerf

Sidewalk Bumpouts

Pocket Park

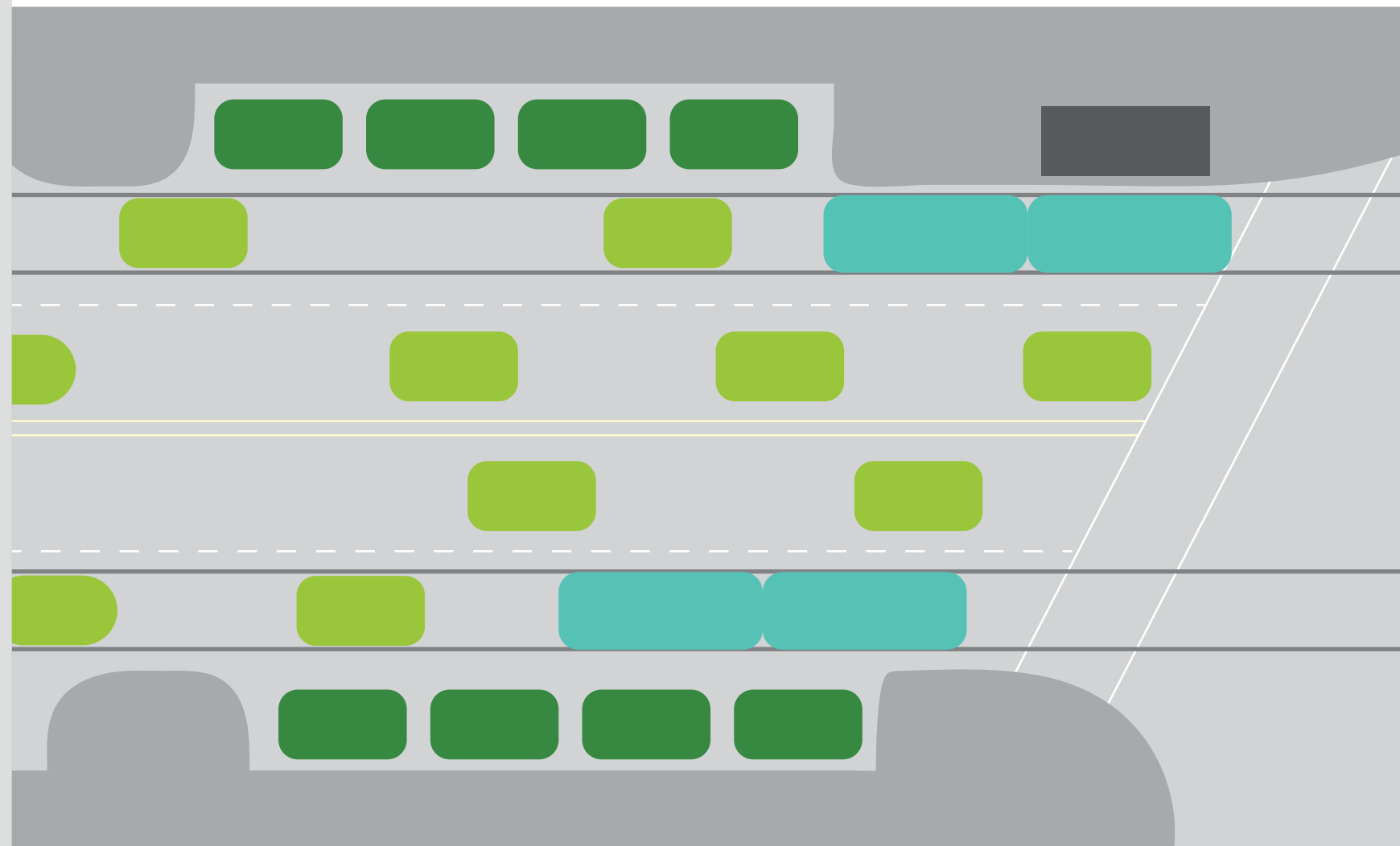
Use of Materials

200 ft

N

Proposed Streetcar Stop

TRACK PLAN



Our chosen track plan keeps the streetcar down both outer sides of the street. The advantage of this option is that there is no lane merging, eliminating the possibility of build ups at intersections as well as being easier for drivers to understand.

■ Street Parking ■ Moving Traffic ■ Streetcar

SECOND HALF PROPOSAL

SCOPE OF WORK

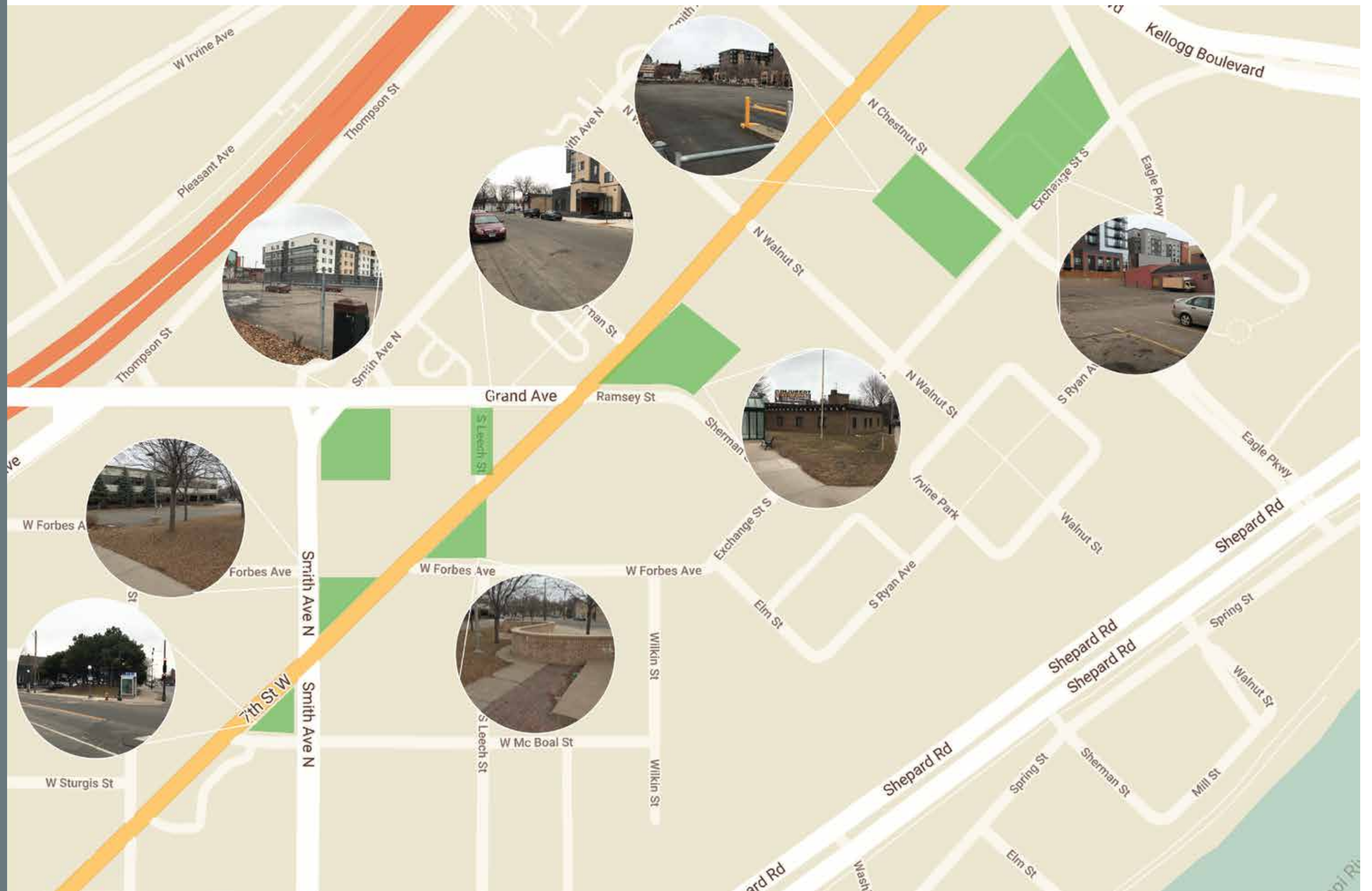
Throughout the second phase, we redefined our approach and reexamined our stop. We viewed the streetcar as an opportunity to **revitalize** West 7th and create a **sense of place** for this portion of St. Paul. We also focused on accessibility, walkability, and green space. **Three defining scales** emerged throughout our thought process, large for our examination of West 7th, medium for our intersection analysis, and small for our stop design.

LARGE SCALE

DESCRIPTION

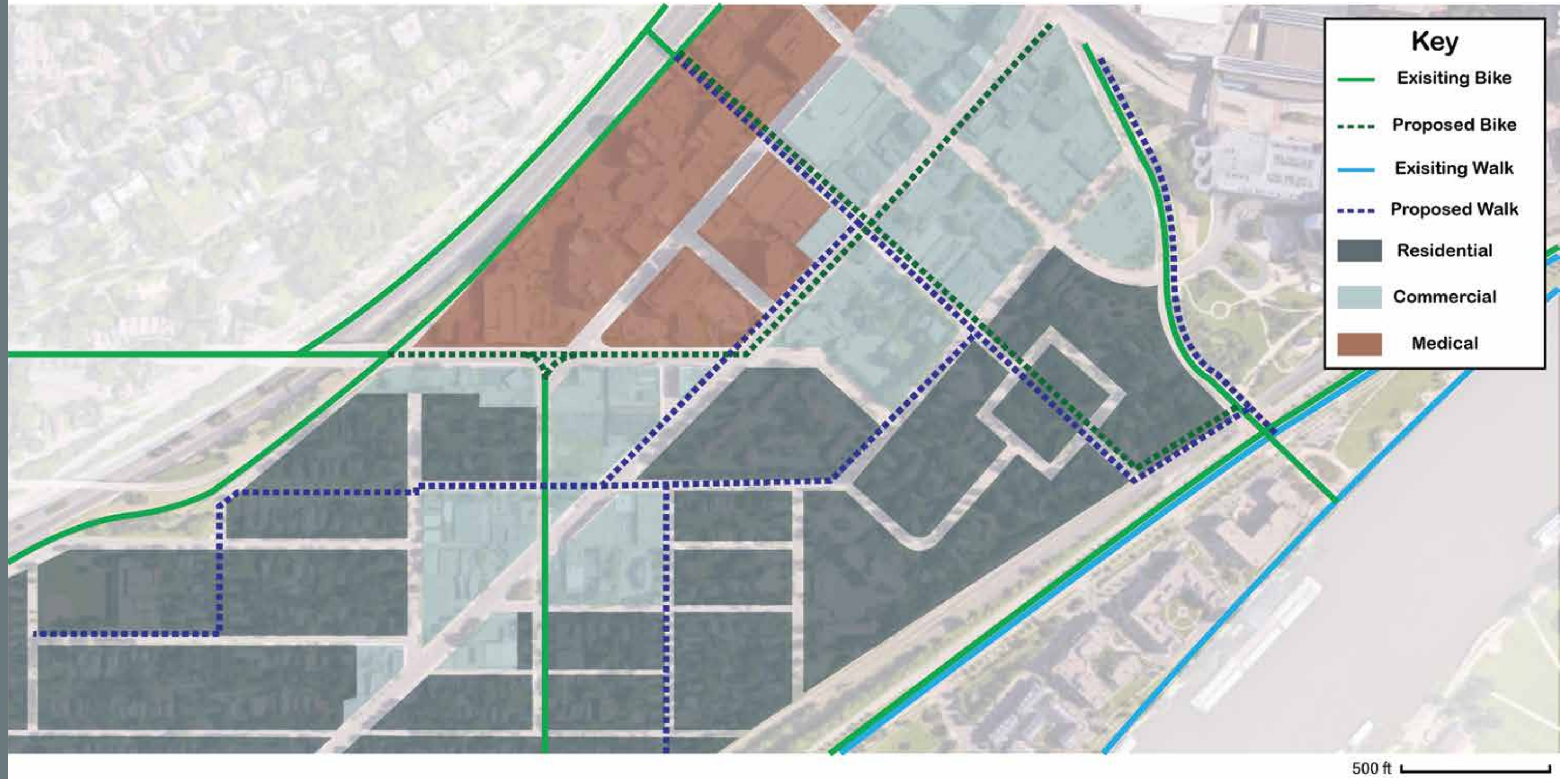
The large scale is where we started and this focused on more general analysis and widespread data. Initially, we surveyed the greater surrounding area of the intersection for **areas of possibility**. This means that these areas of possibility were either currently abandoned or underutilized and we believed that they could be home to something new and more beneficial for the West 7th area. **Parking** was also a prevalent issue that we attempted to solve, the woonerf plan would eliminate a select amount of parking and we identified areas for parking alternatives or future solutions for parking development. We also included a loose proposition for possible locations for dedicated **bike and walk paths** to better connect the areas of West 7th and the river.

AREAS OF POSSIBILITY



PARKING ALTERNATIVES



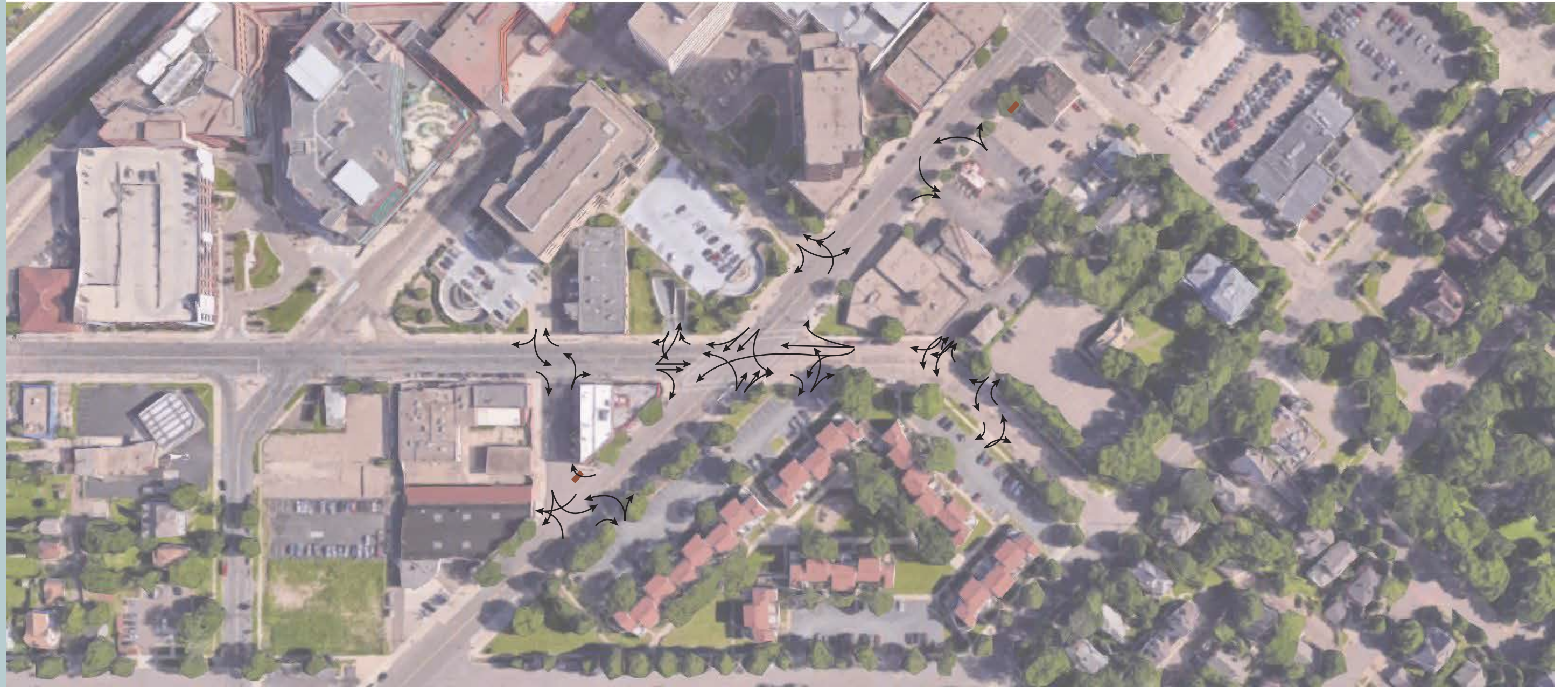


MEDIUM SCALE

DESCRIPTION

The medium scale is where we analyzed the intersection and proposed woonerf area more closely and began to connect **design precedents** to areas we intended to intervene. These **sections** through the intersection and proposed woonerf space (Leech St.) showed areas of possible improvement and gave a sense for the spacing of buildings, sidewalks, streets, and greenspace. The precedents gave a more concrete view into the kind of impression we wanted our space to make onto this intersection.

CURRENT TRAFFIC FLOW



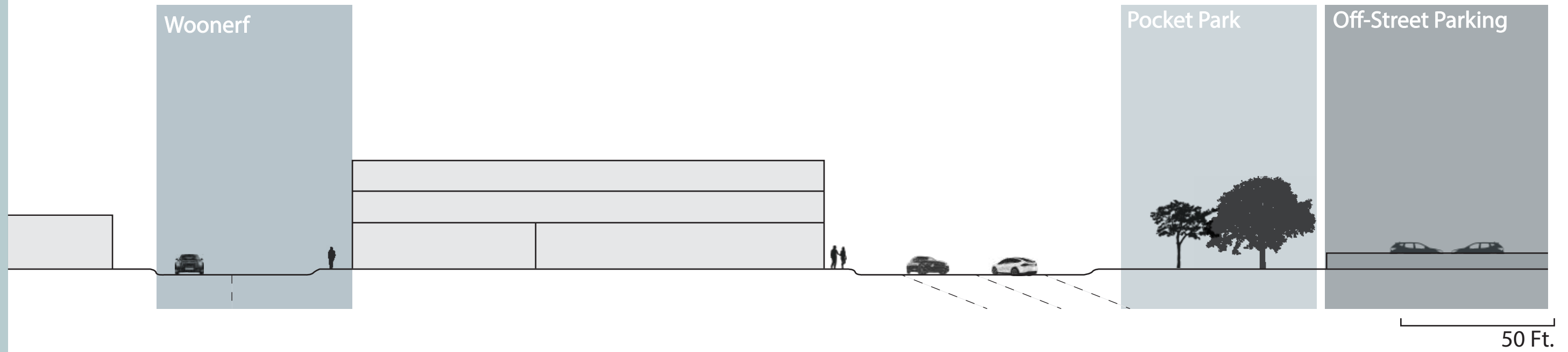
200 ft

- Proposed Streetcar Stop
- Current Traffic Flow

SECTION ONE: HOSPITAL AND GRAND AVE



200 ft

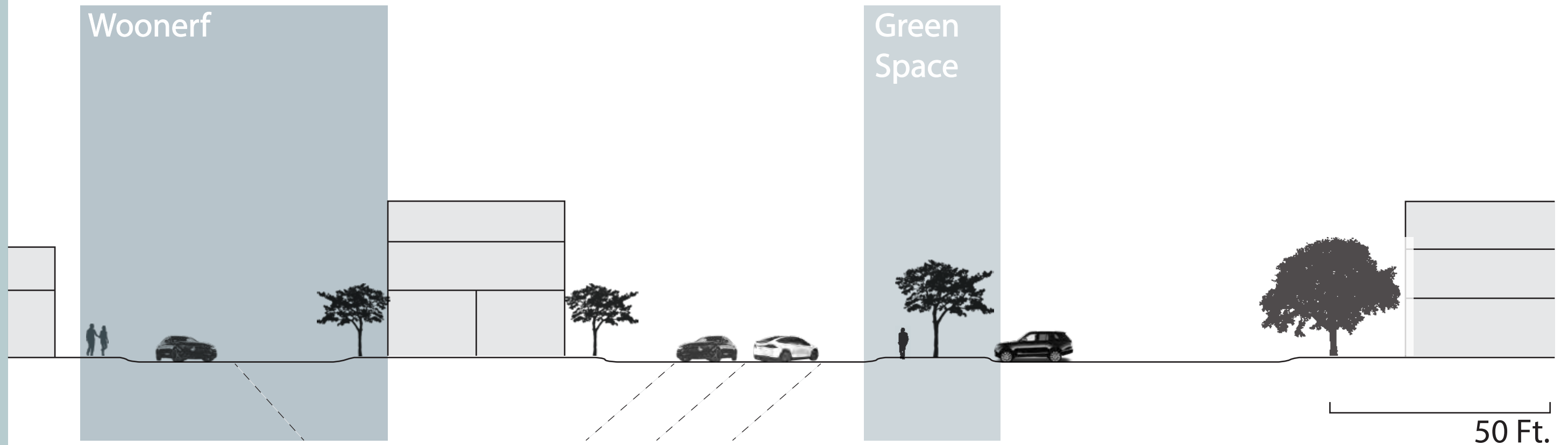


50 Ft.

SECTION TWO: WEST 7 AND WOONERF



200 ft



50 Ft.

Pocket Parks & Installations



Luna Rienne Gallery Parklet

San Francisco
Luna Rienne

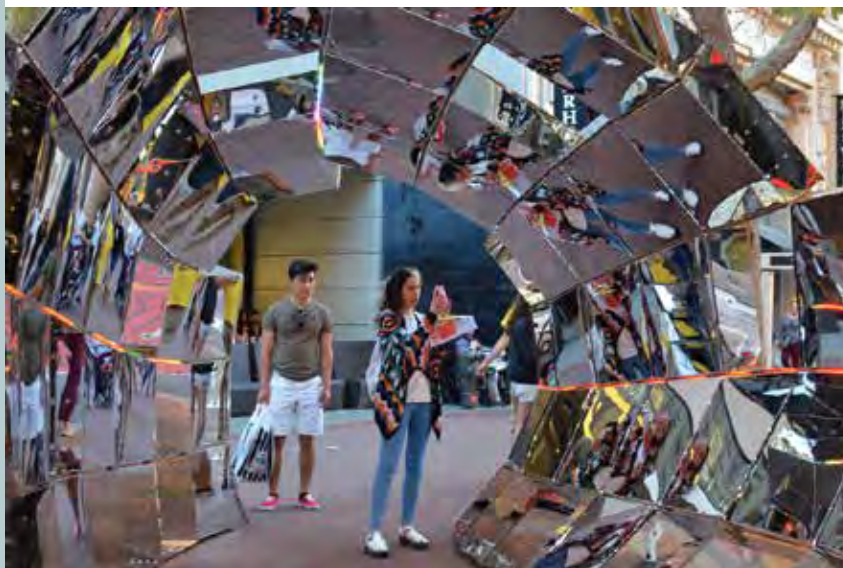
This parklet features a yearly rotating exhibit as a space for public art. Each installation has been funded by sponsors. The gallery has featured murals, landscaped plants, and installations.



Market Street Prototyping Festival

San Francisco
Yerba Buena Center for the Arts and San Francisco Planning Department

This festival features different designers and artists that test out public art and engagement projects. This was born out of a desire to make Market Street more vibrant. The exhibits foster relationships between community members and the space they live in.



Some projects featured at the festival include: The Sidewalk Library (top left), The Create-With-Nature-Cart (top right), peepSHOW (bottom left), and the City Fit Path (bottom right).

Woonerfs & Shared Streets



Mill City Quarter Woonerf

Minneapolis
BKV Group

The word 'woonerf' is a Dutch term that translates as "living streets", with shared space, traffic calming, and low speed limits. It has become popular around the world in order to engage pedestrians.

This woonerf transformed the parking lots between Riverwest Condos and Mill Place into a shared pedestrian space. Further plans to increase lighting and pedestrian connections are under way, including a nice ride station.



Bell Street Park

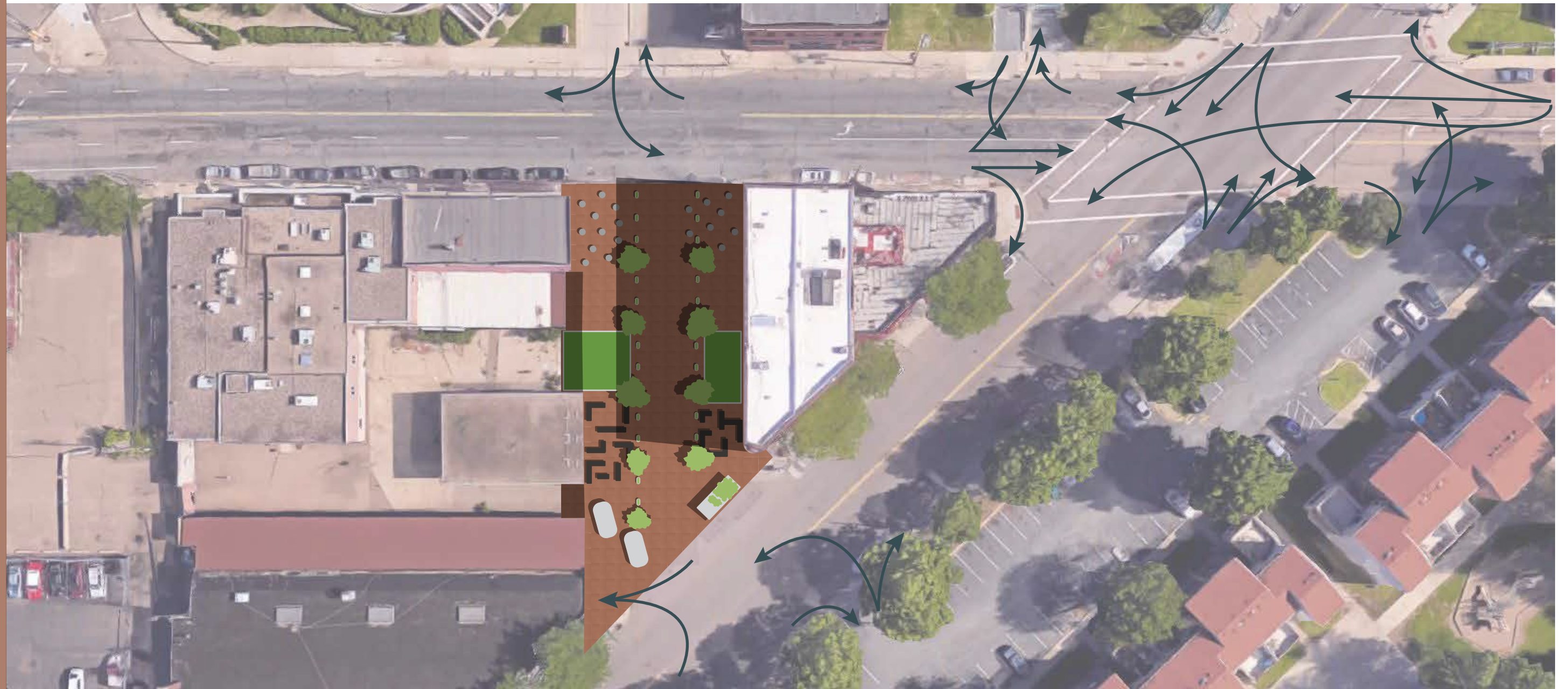
Seattle
SvR

Bell Street Park was transformed from a single-purpose right-of-way into a 4-block section of public green space. Bell Street Park acts as a hybrid of park and street activities, allowing vehicle access while providing public space that brings the community together and creates a strong sense of place.









SMALL SCALE

DESCRIPTION

The small scale focused in on our stop design and our reimagining of **South Leech St.** We propose making S Leech St. a shared street, following the premise of a **woonerf** which directly translates as “living street” from Dutch. This space caters to the pedestrian and decreases the hierarchy that is typical on American roads. The space would act as a **gathering space** for those living in and visiting the West 7th corridor. New S Leech St. would also serve the local businesses by providing **outdoor entertainment space** for the nearby hotel, restaurant, wine bar, and cafe. It would also act as a temporary **installation space** during the summer. The stop itself provides shelter for streetcar users and seamlessly blends into the woonerf by providing seating and greenery. The **green roof** and planters fit with our ideology of providing green space for the city and helps to treat stormwater runoff.



Key

- | | | | | | |
|---|---------------------------------|---|-----------------------------|---|------------------------|
|  | Proposed Stop |  | Moveable Seating and Chairs |  | Projected Traffic Flow |
|  | Food Truck |  | Planter Boxes |  | Tree |
|  | Non-Moveable Seating and Chairs |  | Planting Areas | | |

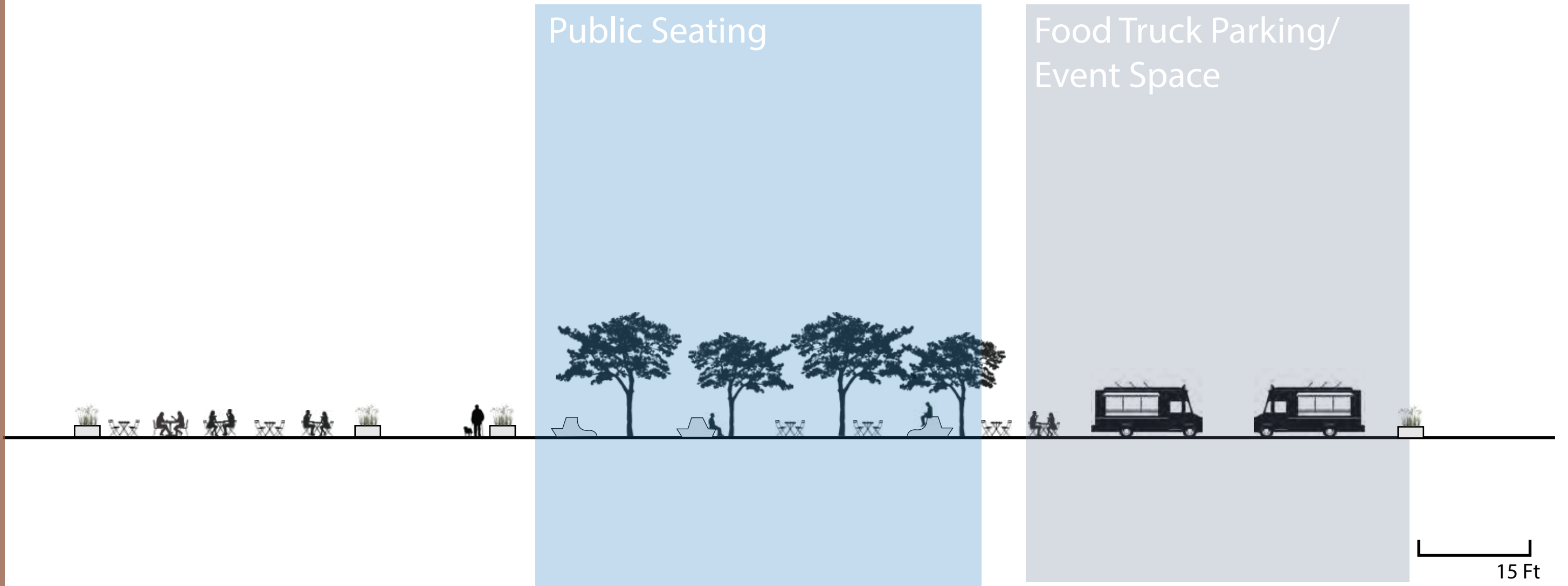
50 ft 

SECTION ONE: LENGTH OF WOONERF

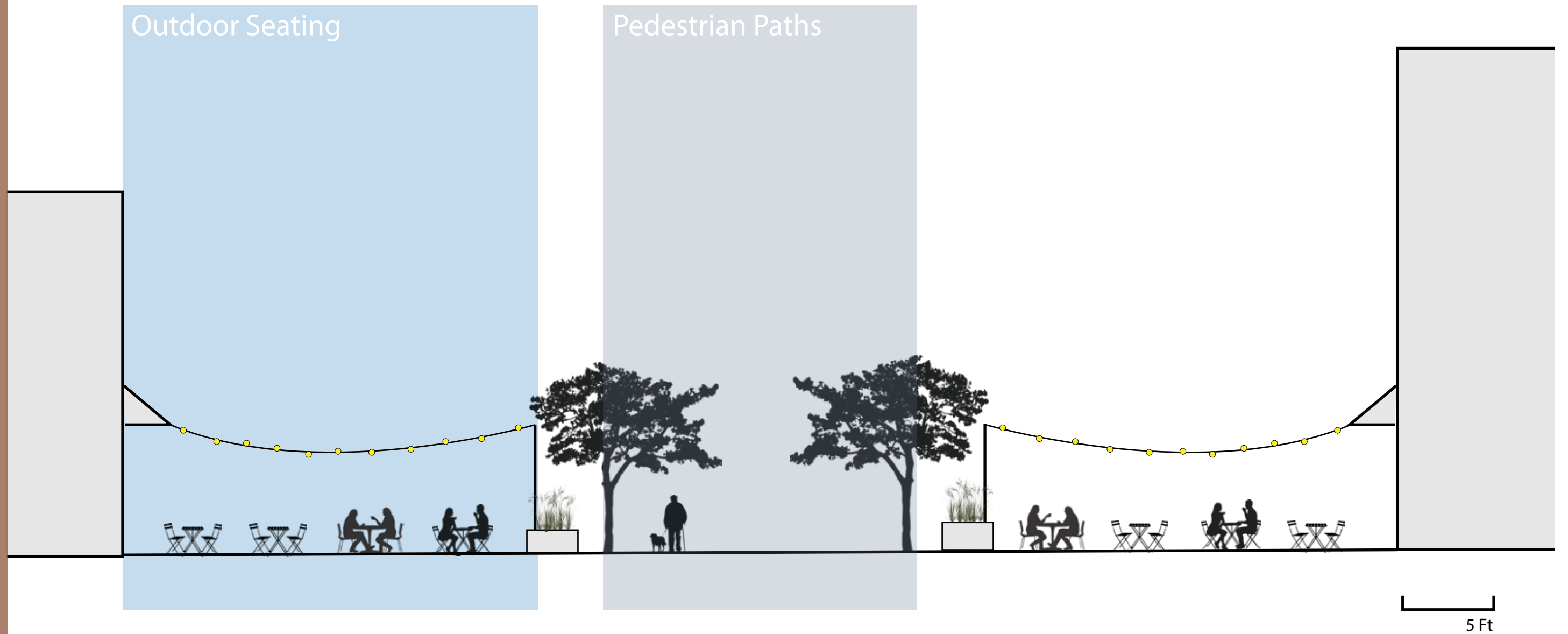


Public Seating

Food Truck Parking/
Event Space



SECTION TWO: SEATING SPACE



RENDER ONE: PLANTERS AND SEATING



RENDER TWO: OUTDOOR SEATING, NIGHT



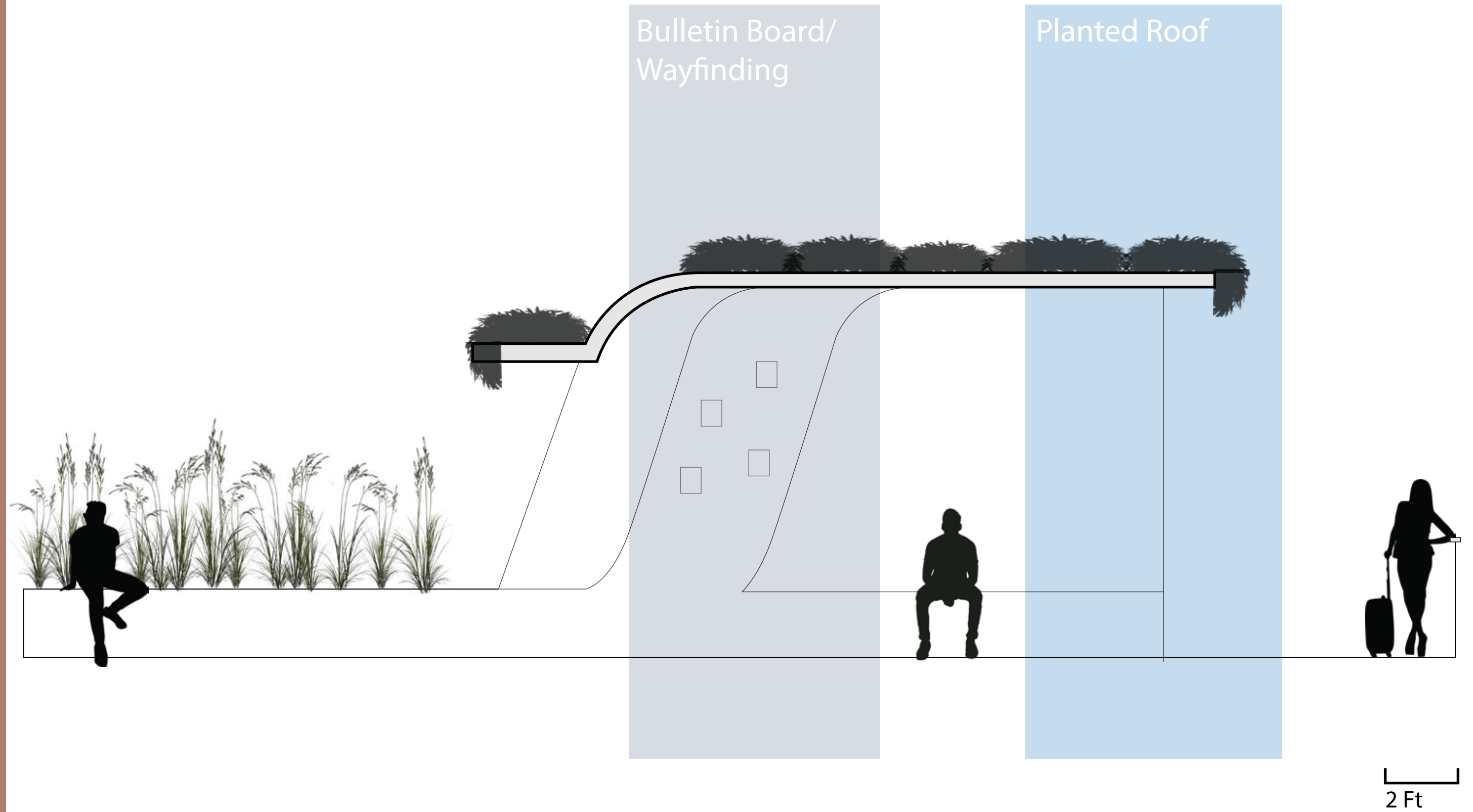
RENDER TWO: OUTDOOR SEATING, DAY



RENDER THREE: STREETCAR STOP

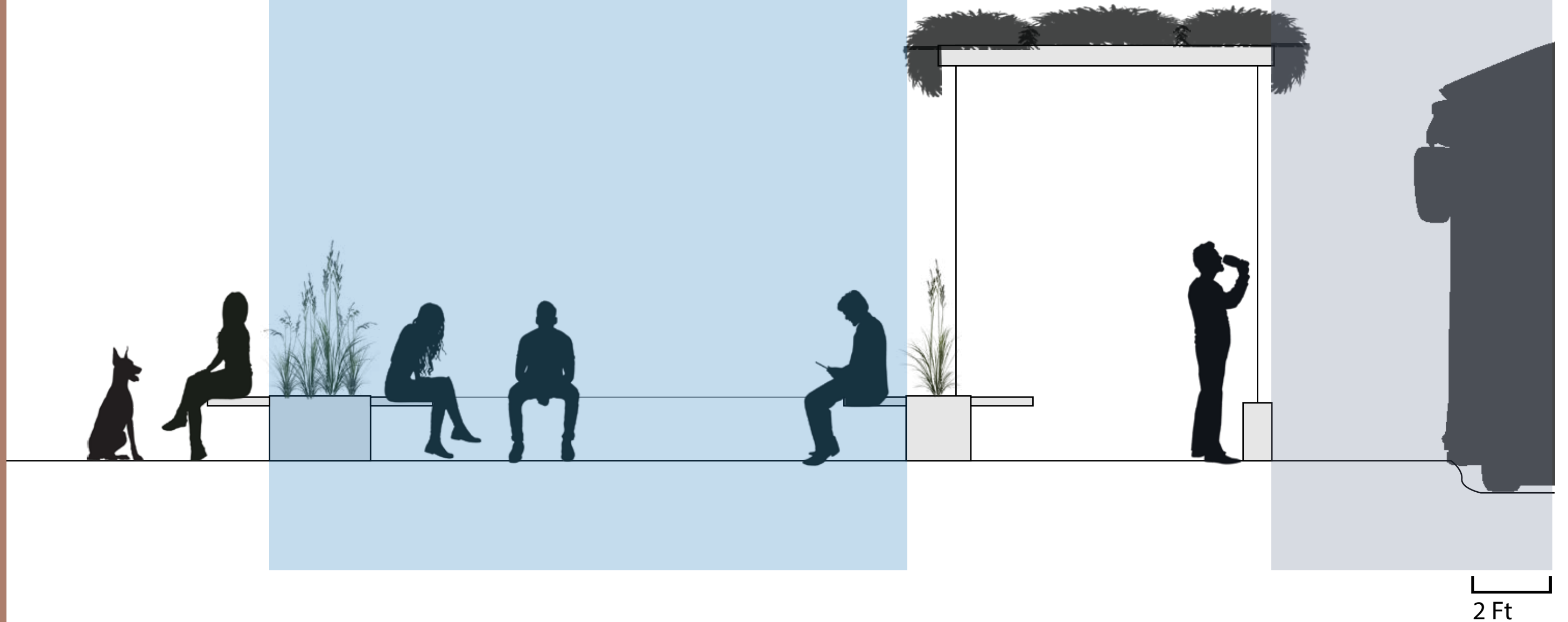


STREETCAR STOP SECTION ONE



Public Seating Near Streetcar Stop

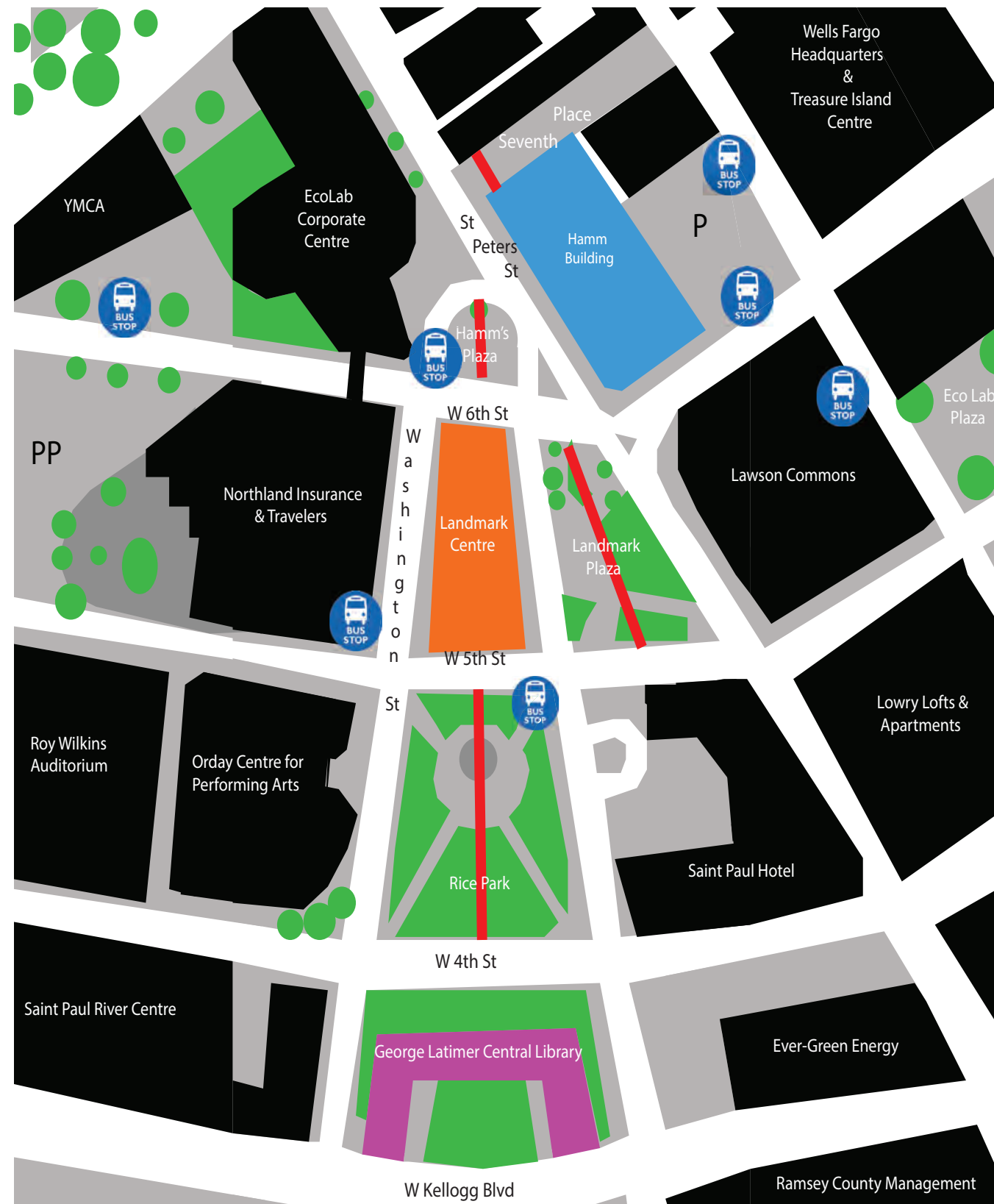
Level Entry at Stop





THE LANDMARK GATEWAY

IAN ALBERS - BEN BLACKBURN - DAVID ENRRIGUE
ALEX JOHNSON - JORDAN MACINTOSH



SITE CONTEXT

RELATION TO DOWNTOWN ST PAUL

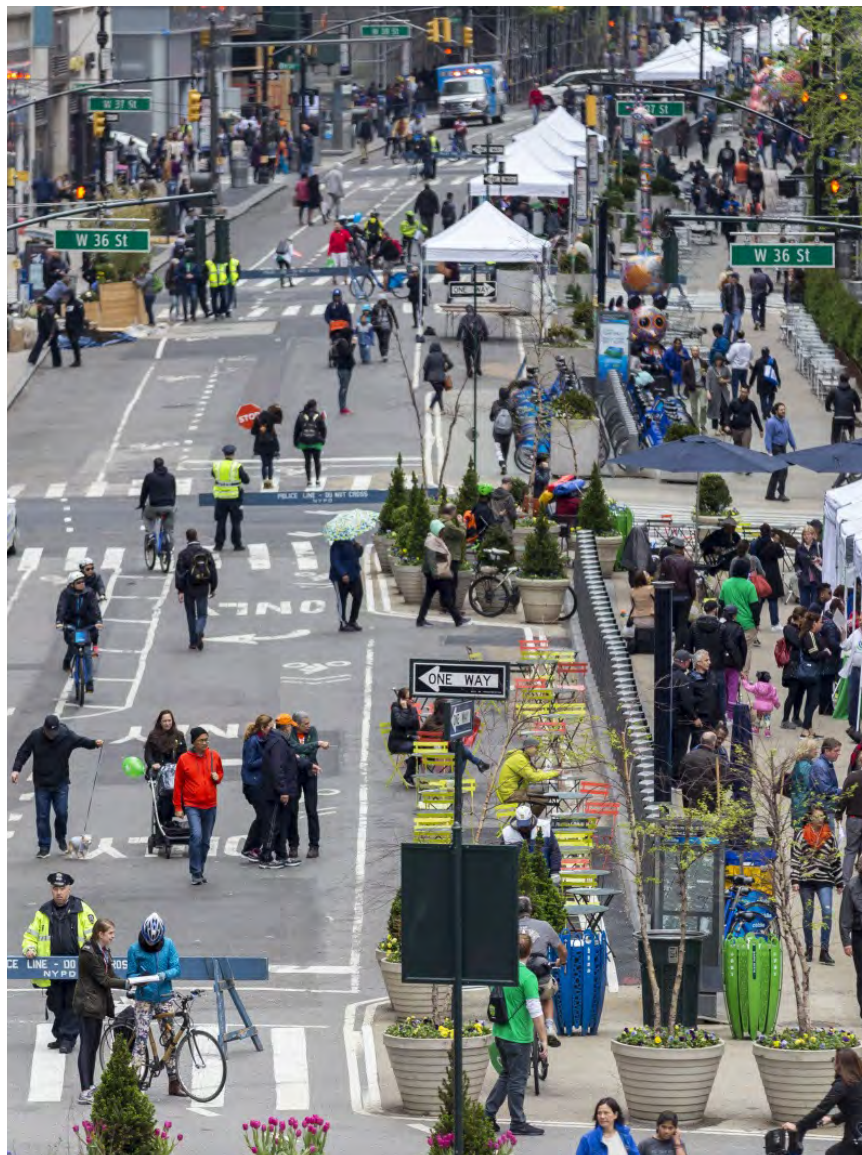


MAP KEY

- = Building, Structure
- = Sidewalk, Cement space
- = Locally Listed Historic Site
- = Nationally Listed Historic Site
- = Nationally and Locally Listed Historic Site
- = Grass, Trees, Park
- BUS
STOP = Bus Stop
- P/PP = Parking / Private Parking

KEY CONCERNS

PEDESTRIAN SAFETY



CONNECTION AND FLOW

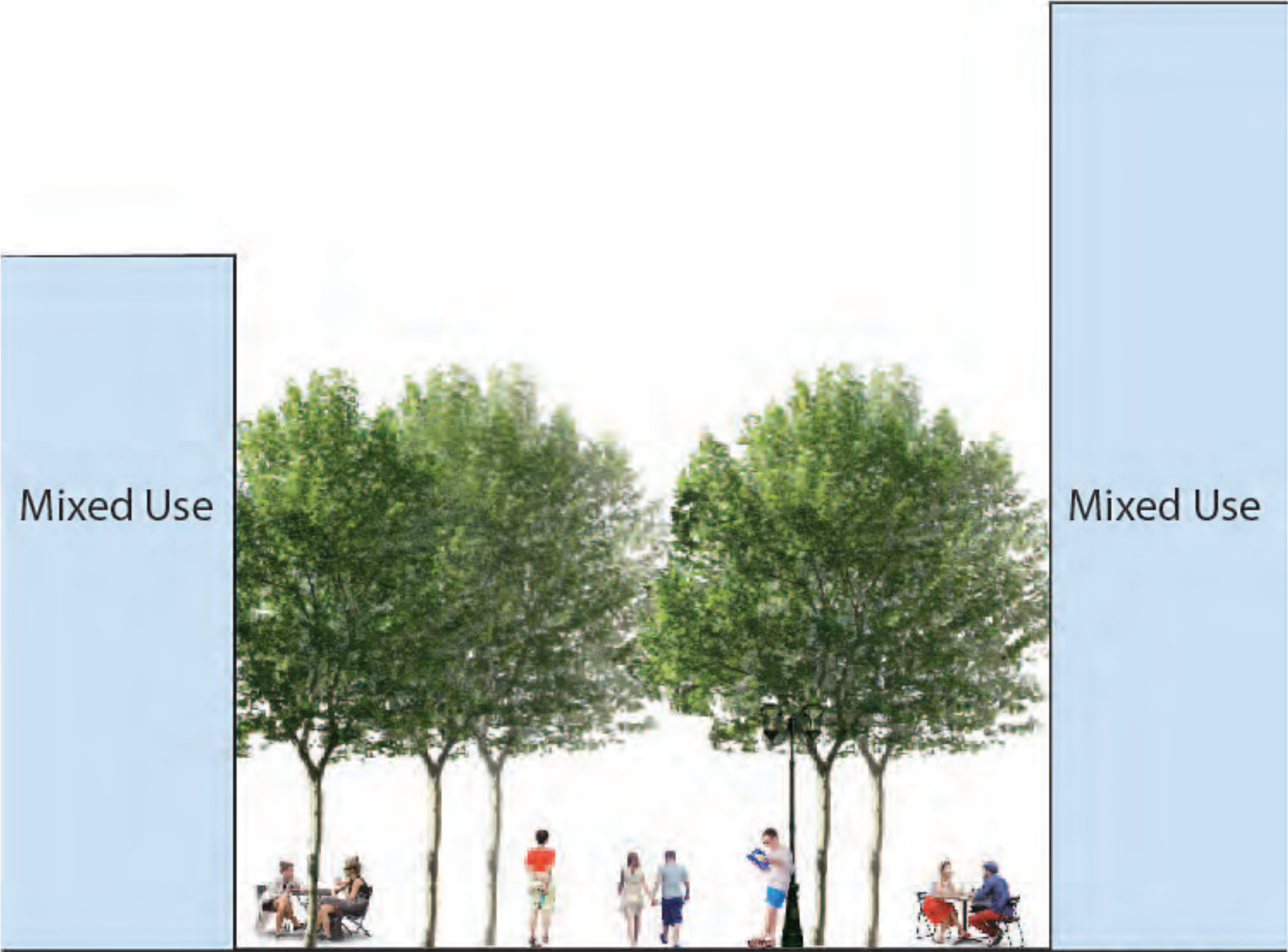


USAGE AND INFRASTRUCTURE



SEVENTH PLACE

CURRENT SECTIONS

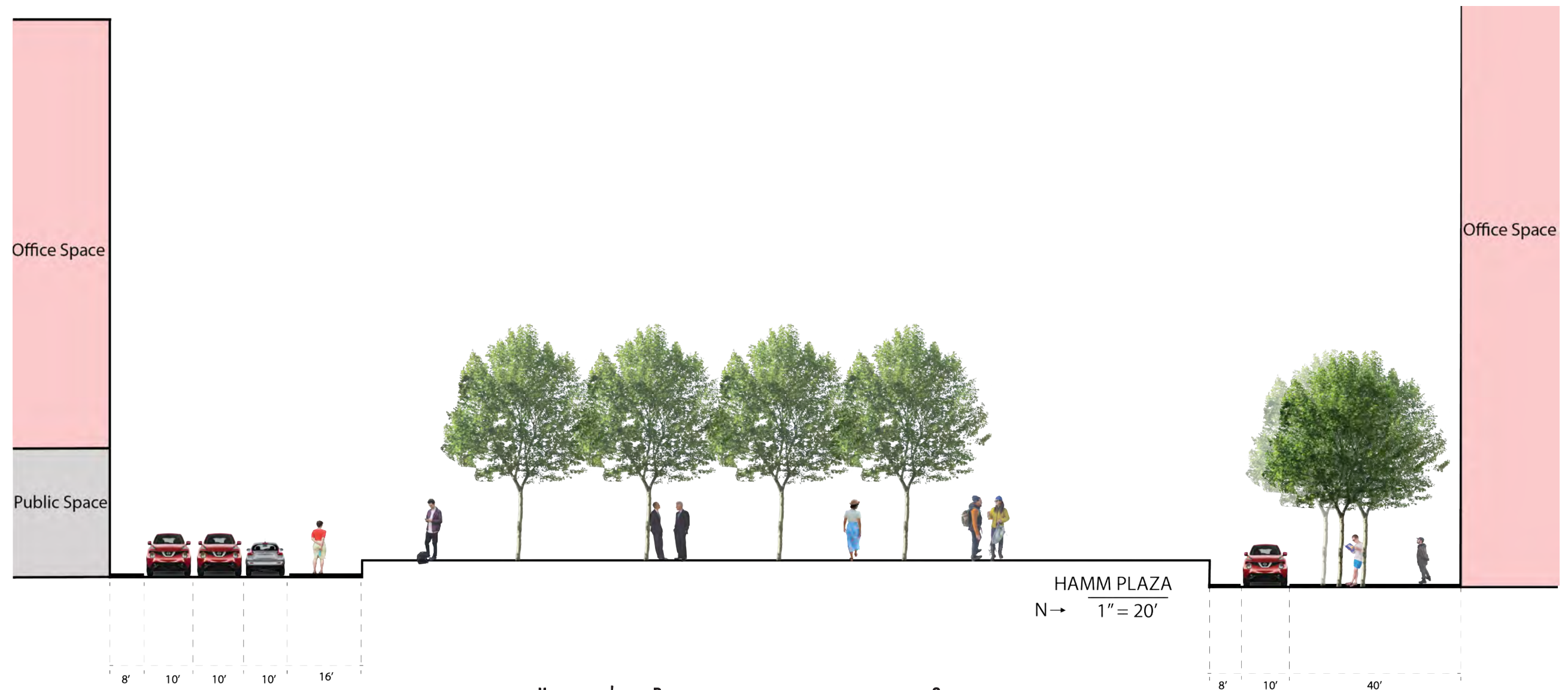


SEVENTH PLACE IS A SECLUDED, PEDESTRIAN ONLY STREET ON THE NORTHERN END OF THE LANDMARK GATEWAY. IT IS LINED ON EITHER SIDE BY SHOPS AND RESTARUANTS, AND INCLUDES A THEATER.

N → 7th Place
1" = 20'

CURRENT SECTIONS

HAMM'S PLAZA



HAMM'S PLAZA IS SOUTH OF SEVENTH PLACE AND FUNCTIONS AS A ROUNDABOUT FOR ONE-WAY TRAFFIC. THIS PLAZA CURRENTLY HAS A BUS STOP AND WILL INCLUDE THE NEW STREETCAR STOP

CURRENT SECTIONS

LANDMARK PLAZA



LANDMARK PLAZA IS LOCATED IN THE CENTER OF THE LANDMARK GATEWAY. IT IS A POPULAR VENUE FOR EVENTS SUCH AS THE WELLS FARGO WINTER SKATE AND HAS THE POTENTIAL TO BE A KEY NODE FOR THE SITE.

CURRENT SECTIONS

RICE PARK

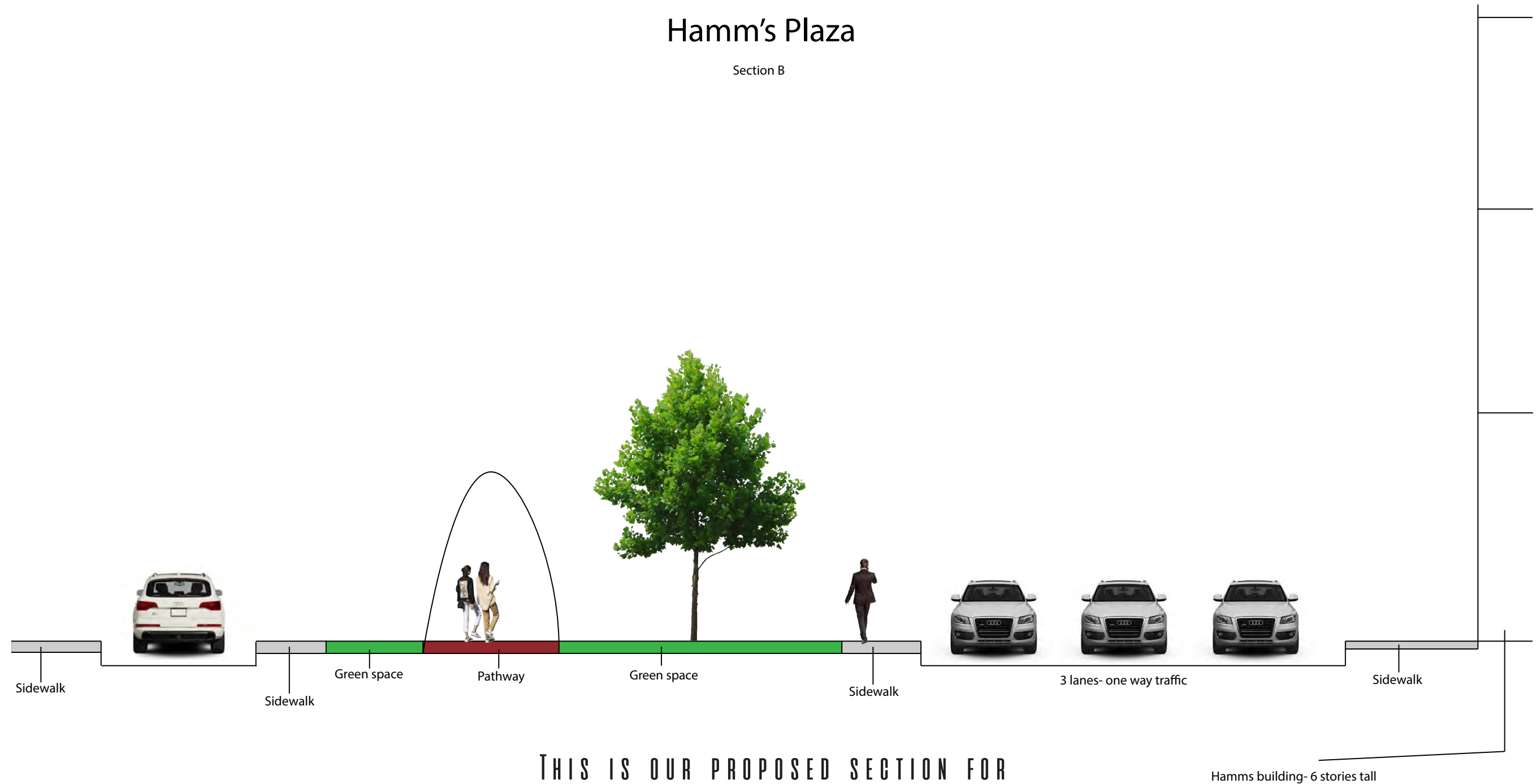


RICE PARK IS LOCATED ON THE SOUTHERN
BOUNDARY OF THE LANDMARK GATEWAY.
THE PARK IS CURRENTLY UNDER
RESTORATION AND PROMISES MANY
FUNCTION AND AESTHETIC IMPROVEMENTS.

PROPOSED SECTIONS

Hamm's Plaza

Section B

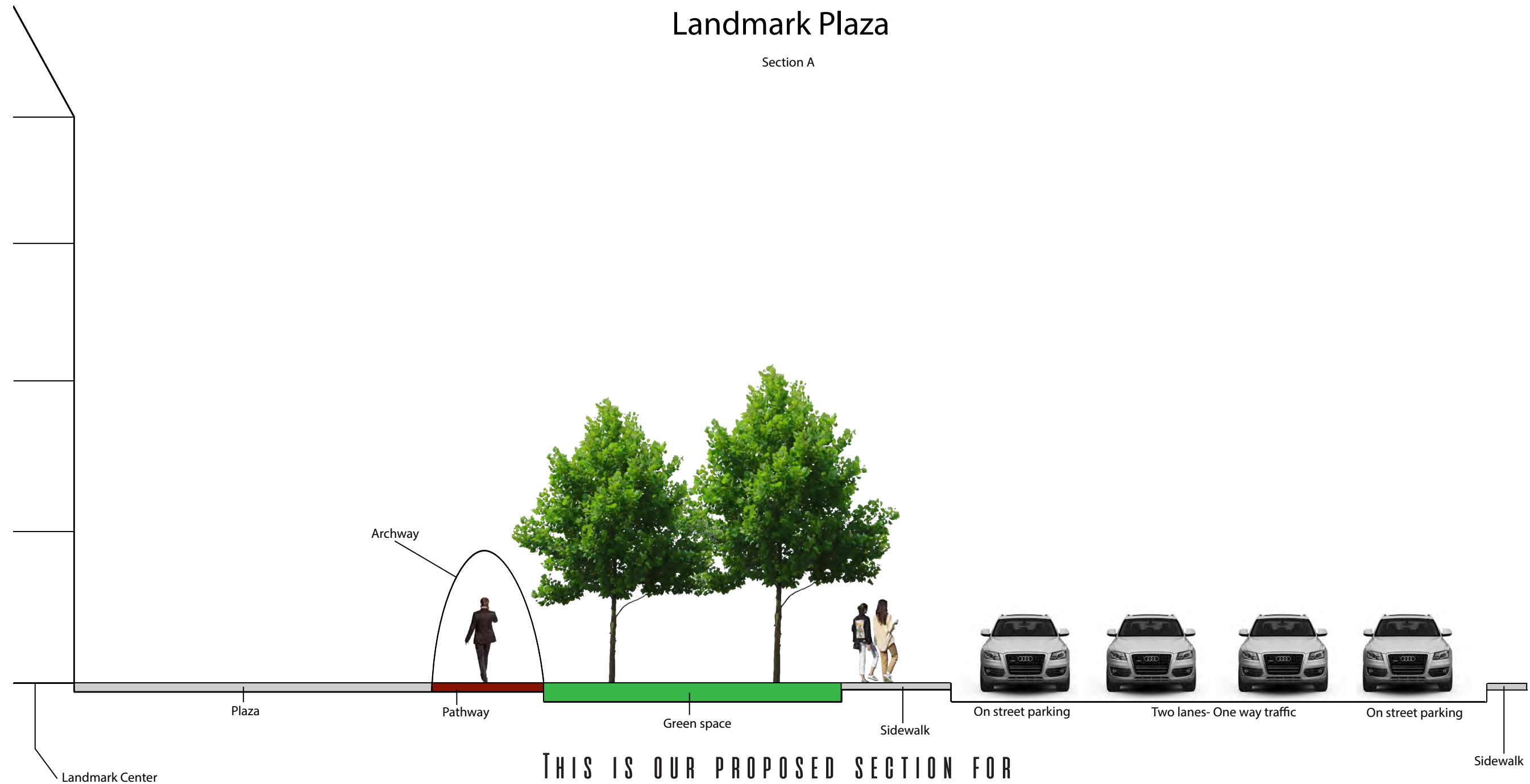


THIS IS OUR PROPOSED SECTION FOR
HAMM'S PLAZA. IT INCORPORATES
THE LONG SITE PATH WITH ARCHES AS
WELL AS INCREASED GREEN SPACE.

PROPOSED SECTIONS

Landmark Plaza

Section A

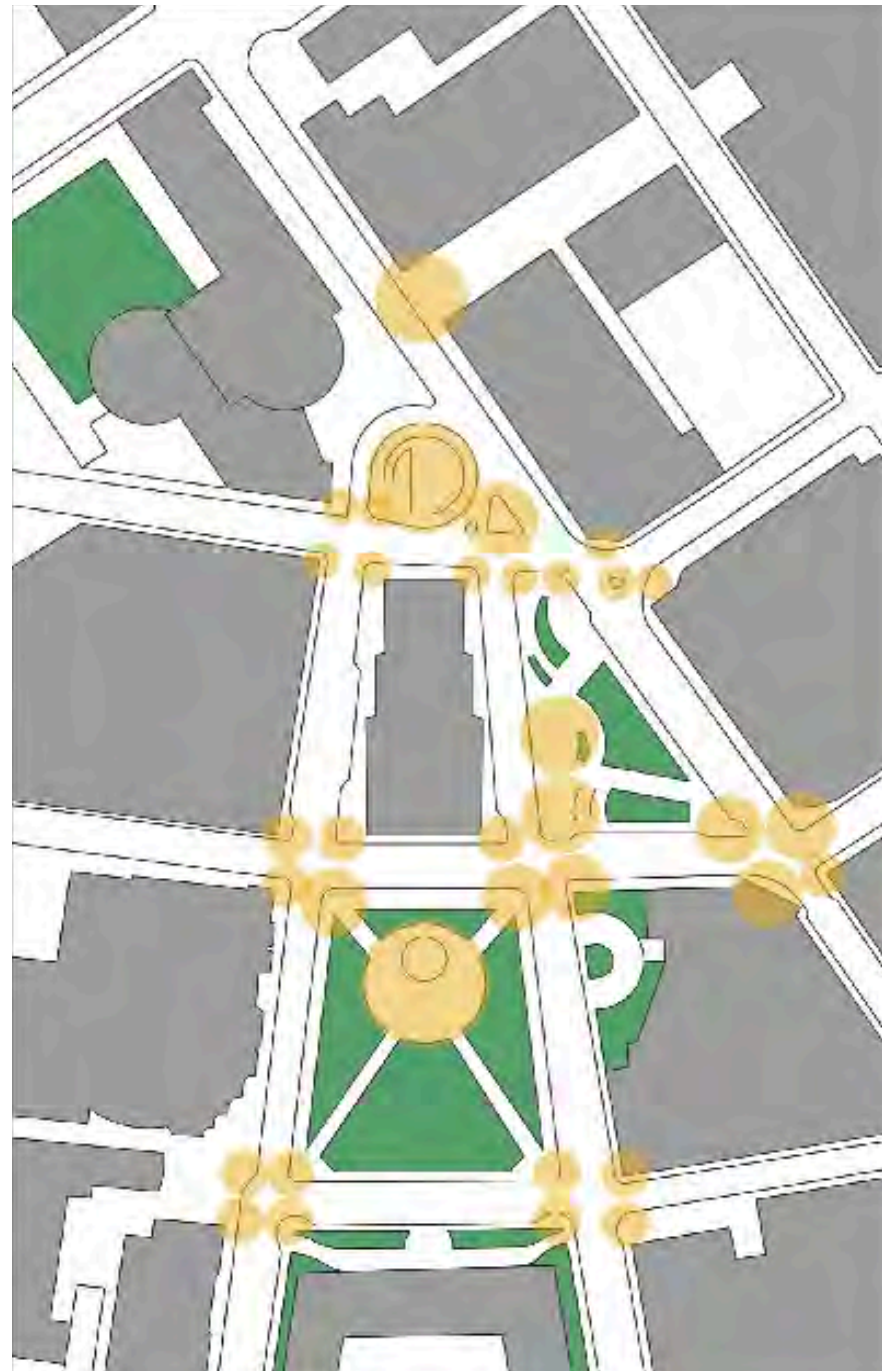


THIS IS OUR PROPOSED SECTION FOR
LANDMARK PLAZA. IT OFFERS INCREASED
PEDESTRIAN SPACE WITH THE ABSORPTION OF
MARKET STREET INTO LANDMARK PLAZA.

PEDESTRIAN SAFETY

AREAS OF LIGHTING CONCERN





MANY AREAS WITHIN THE LANDMARK GATEWAY HAVE INSUFFICIENT LIGHT CURRENTLY. THIS NEEDS TO BE ADDRESSED TO INCREASE PEDESTRIAN SAFETY



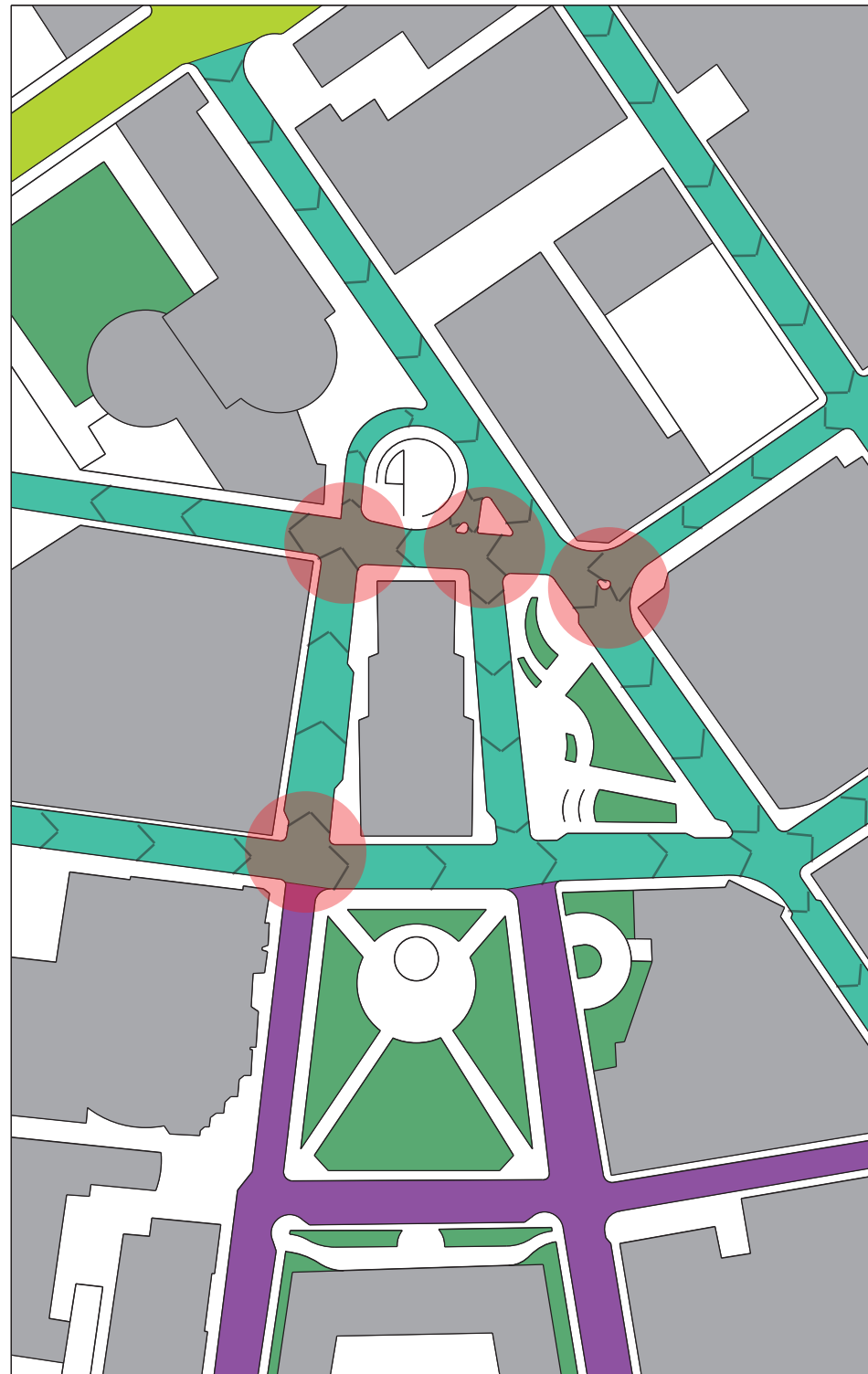
LIGHTING SOLUTIONS



Lighting Key

-  = Inground Lighting
-  = High Output Bulbs
-  = Strung Lighting
-  = Pole Lighting

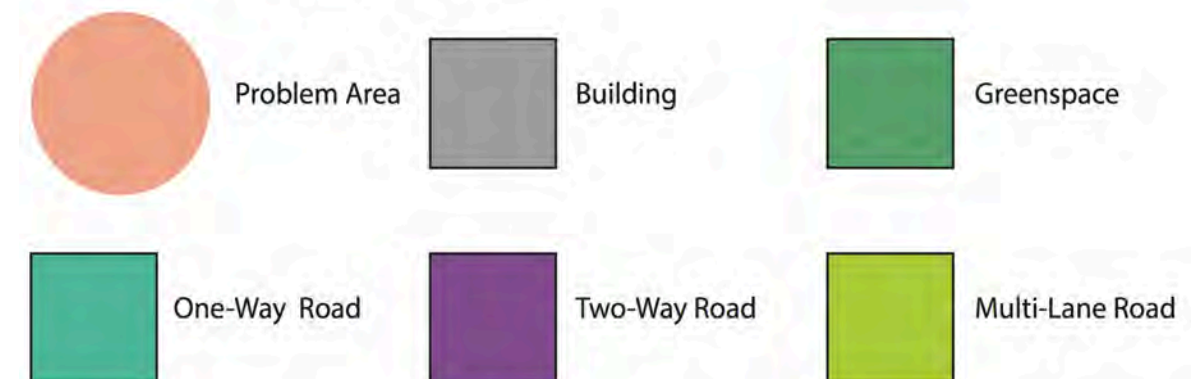
TRAFFIC CONCERNS



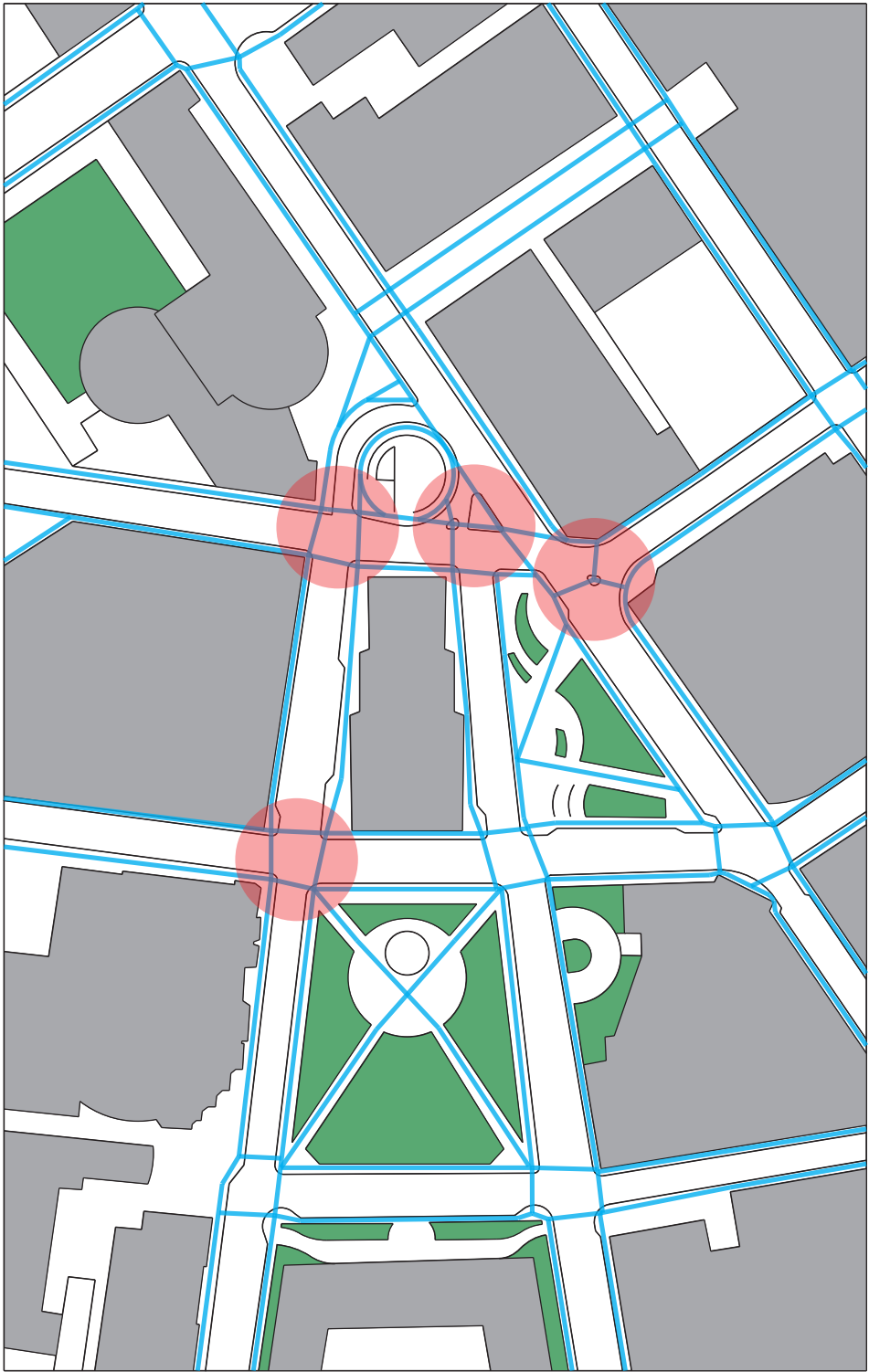
PEDESTRIAN SAFETY

WITH MANY ONE WAY ROADS IN DIFFERENT DIRECTIONS AROUND THE LANDMARK GATEWAY PEDESTRIAN CROSSINGS CAN BE HAZARDOUS. THESE HIGHLIGHTED AREAS NEEDED THE MOST IMPROVEMENT.

Traffic Concern Key

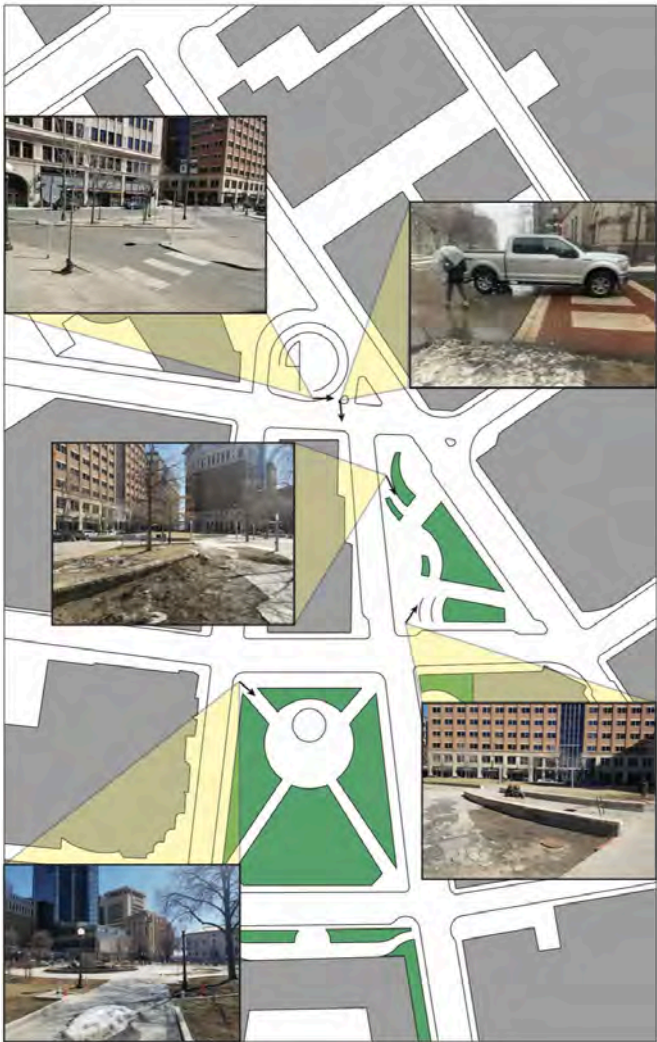


PEDESTRIAN CONCERNS



PEDESTRIAN SAFETY

THIS MAP SHOWS THE CURRENT PEDESTRIAN ROUTES THROUGH THE LANDMARK GATEWAY. HIGHLIGHTED ARE SPECIFIC INTERSECTIONS POSING THE MOST DANGER TO PEDESTRIANS.

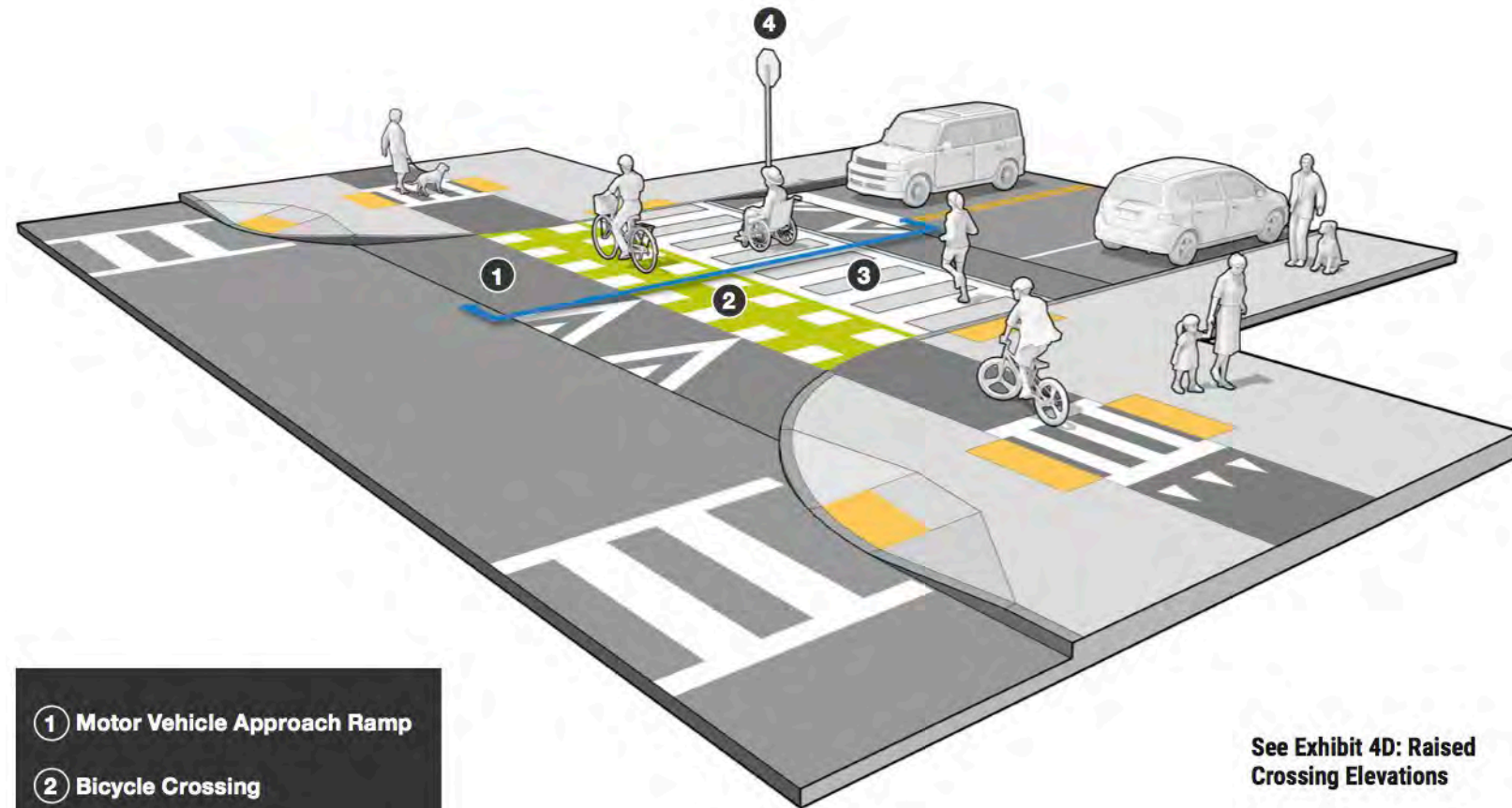


Pedestrian Concern Key



PEDESTRIAN SAFETY

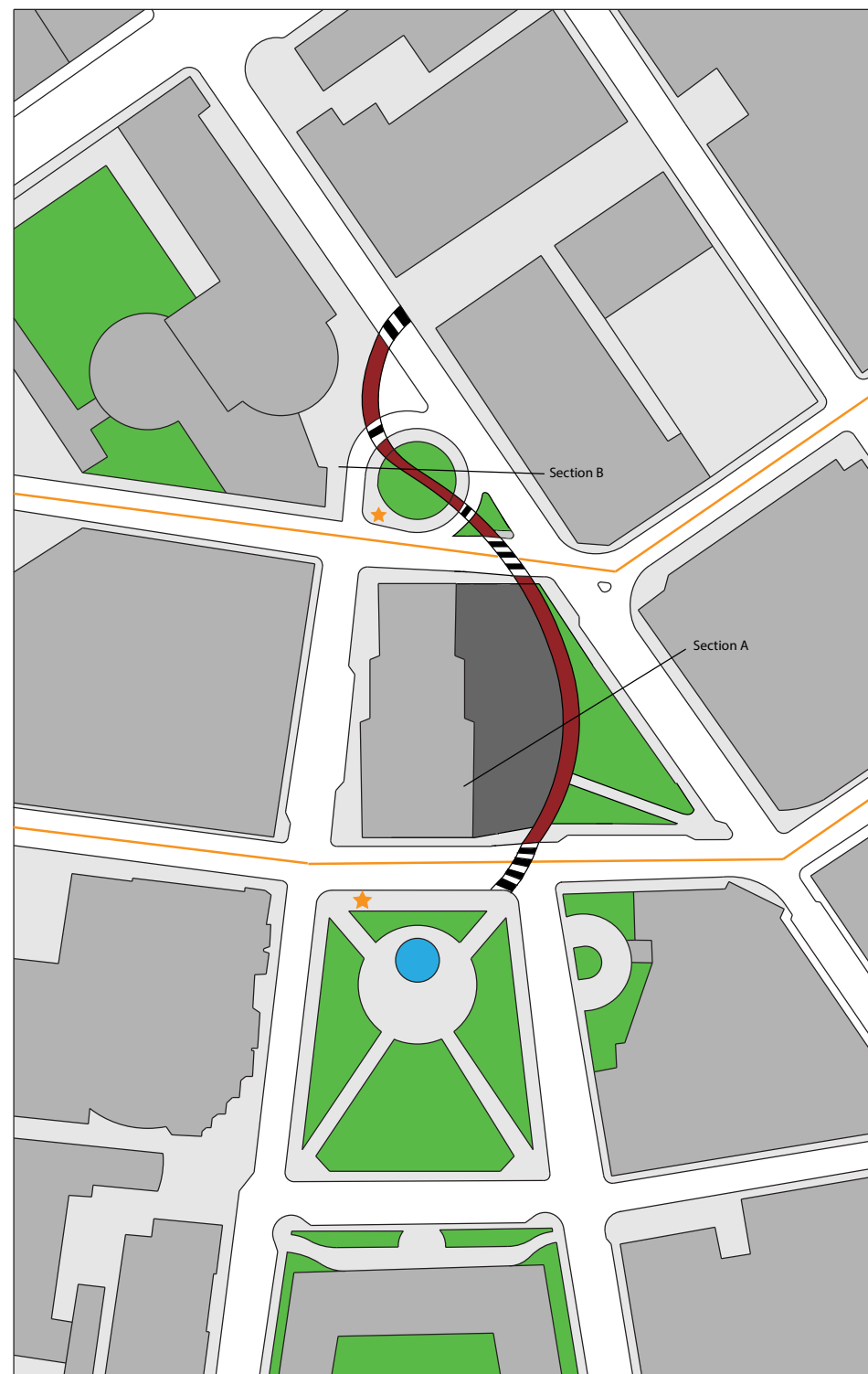
ELEVATED CROSSINGS



WE PROPOSE TO INCORPORATE ELEVATED CROSSWALKS THAT USE A SPEED BUMP AS AN ADDED MEASURE FOR TRAFFIC AWARENESS. THESE WOULD BE MODIFIED TO INCORPORATE STREETCAR RAILS IN THE CASE OF THE LANDMARK GATEWAY.



CONNECTION PATHWAY



CONNECTION AND FLOW

TO MAKE THE LANDMARK GATEWAY
FEEL LIKE ONE COHESIVE
ENVIRONMENT WE PROPOSE A LONG
WINDING PEDESTRIAN PATHWAY. THIS
PATHWAY WOULD INCORPORATE
ARCHWAYS, HANGING LIGHTS, GREEN
SPACE AND NATURAL MATERIALS LIKE
LIMESTONE.

Key:



= Streetcar stop



= Green space



= Water Fountain



= Steertcar Line



= Pathway



= New plaza space

CONNECTION AND FLOW

PROPOSED PATHWAY



TO THE LEFT IS A RENDERING OF A POTENTIAL PATHWAY VIEW FROM HAMM'S PLAZA. THE PHOTOS BELOW ARE PRECEDENT PHOTOS WE FOUND PARTICULARLY INSPIRING.
















USAGE AND INFRASTRUCTURE

THE MAP TO THE LEFT SHOWS THE USAGE OF THE BUILDINGS AND INFRASTRUCTURE AROUND THE LANDMARK GATEWAY.

Value Map Key

	Greenspace		St Paul Hotel		Library
	Restaurant		Parking		Children's Museum
	Business		Event Center		Theater
	Landmark Center		Ordway		

USAGE AND INFRASTRUCTURE

May

2nd - Schubert Club Courtroom Concert
 2nd - Ordway Cabaret: Rise Up!
 2nd - Dish: Cuisine for Change
 3rd - The Tallest Man on Earth Tour
 3rd - Jane Lynch & Kate Flannery
 3rd-5th - Festival of Nations
 4th - Omara Portuondo: Last Kiss
 4th-19th - La Traviata
 5th - Lizzo
 5th - MN Teacher of the Year Conference
 6th-9th NDC Minnesota 2019
 7th - SPCPA Spring Concert
 8th-12th - StarQuest Performing Arts Competition
 9th - Schubert Club Courtroom Concert
 9th-12th - Autonomy
 12th - St. Paul Civic Symphony Concert
 14th - Passion Pit Manners Tour
 15th - Loffler's Tech Fest 2019
 18th - Haydn's Surprise Symphony
 19th - Border CrosSing Concert
 19th - Eddie Palmieri
 21st - VocalEssence Community Concert
 23rd - Wonderware Midwest User Conference
 23rd-25th - Mozart's Jupiter Symphony
 25th - Snarky Puppy
 31st - Gogol Bordello Tour
 31st-1st - Secret Agent 23 Skidoo
 31st-1st - Golden Dragon Acrobats
 31st-23rd - Heaven

June

1st - Stillwater Area High School Commencement
 1st - The Man Who Planted Trees
 7th-9th - Mozart's Don Giovanni
 15th - Colin Mochrie & Brad Sherwood
 18th-22nd - The Lightning Thief
 27th - The New Standards Summer Festival
 28th-29th - Lake Street Dive
 29th - Napoleon Dynamite: A Conversation
 29th-30th - One Voice Mixed Chorus

July

6th - Evening with Jane Fonda
 13th - The Struts Tour
 12th-25th - Agatha Christie: Rule of Thumb
 14th-28th - Jefferson Township Pageant
 23rd-11th - 42nd St
 30th-31st - Tenacious D Tour

August

9th - Make America Grin Again
 16th - Los Lobos Tour

September

10th - Massive Attack: MezzanineXX1
 10th-22nd - Smokey Joe's Cafe
 20th-20th - Aubergine
 22nd - The Song Poet Live
 27th - Andrew Bird
 27th-2nd - The Rocky Horror Show

October

2nd - Mac Demarco
 5th - The Current Presents Gaelynn Lea
 17th-19th - The New One
 19th - Explosions in the Sky
 31st - Judah & The Lion Tour

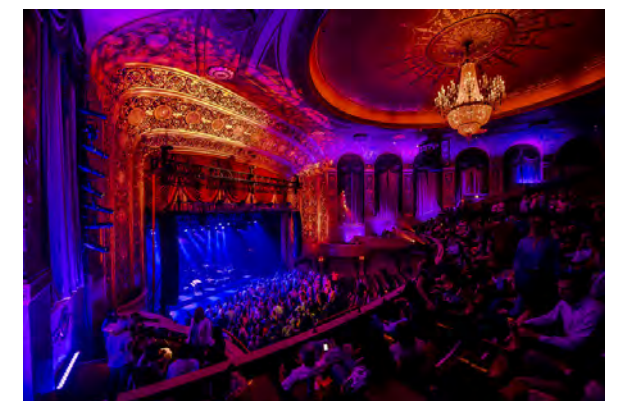
November

15th-22nd - Pride and Prejudice

December

3rd-29th - Ever After

SHOWN HERE ARE UPCOMING EVENTS
 HAPPENING THIS YEAR IN THE
 LANDMARK GATEWAY. THESE
 IMAGES SHOW VARIOUS BUILDINGS IN
 USE AROUND THE SITE.

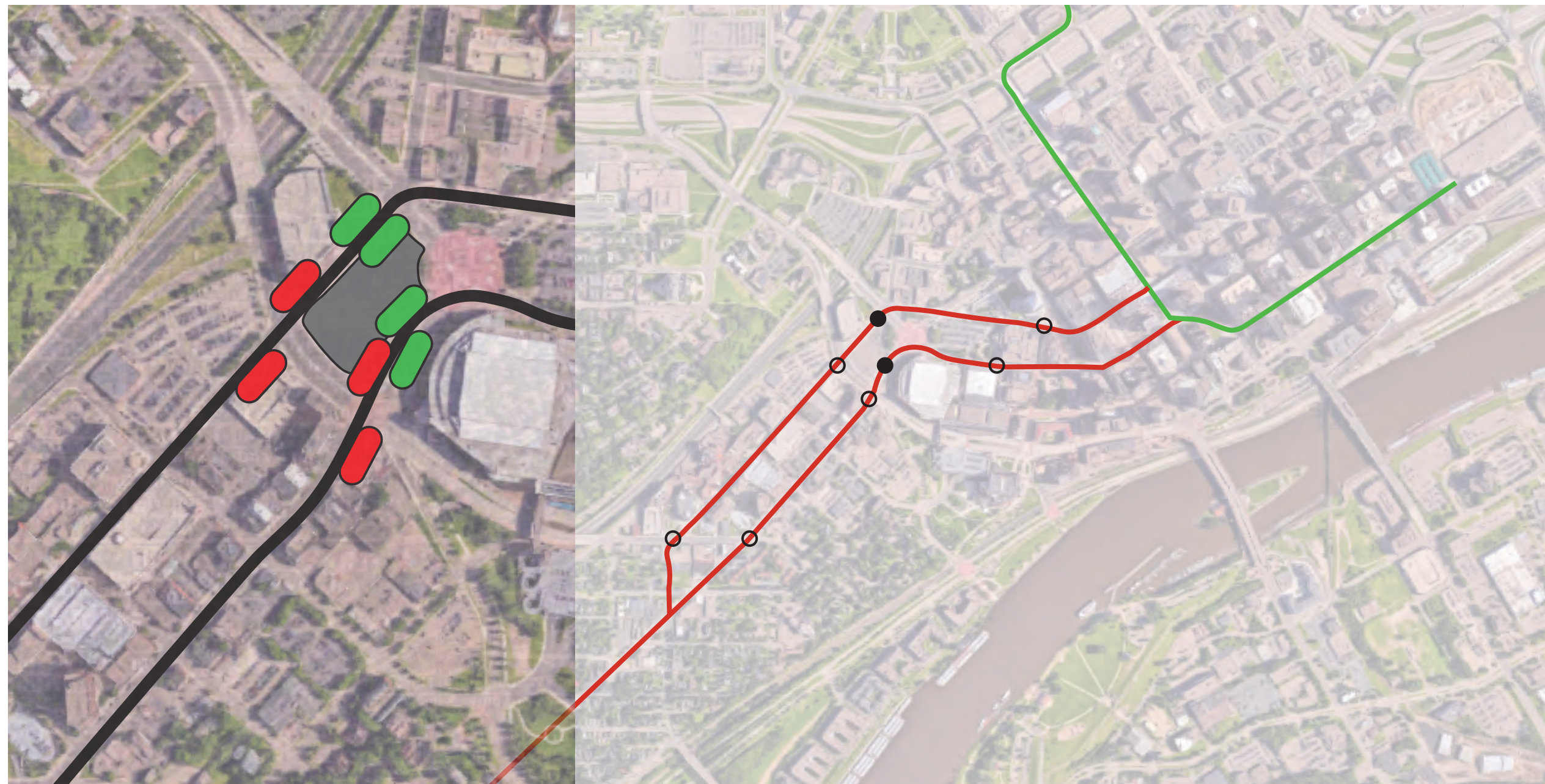


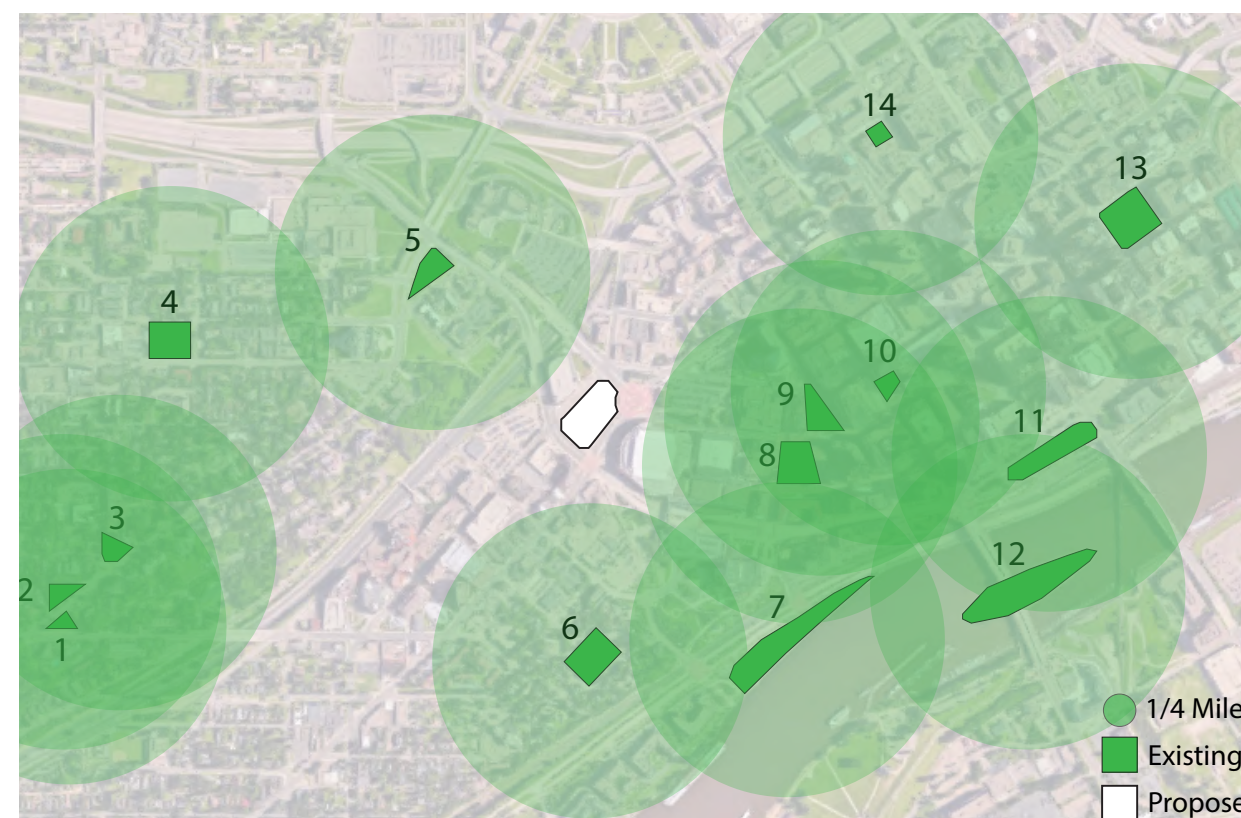
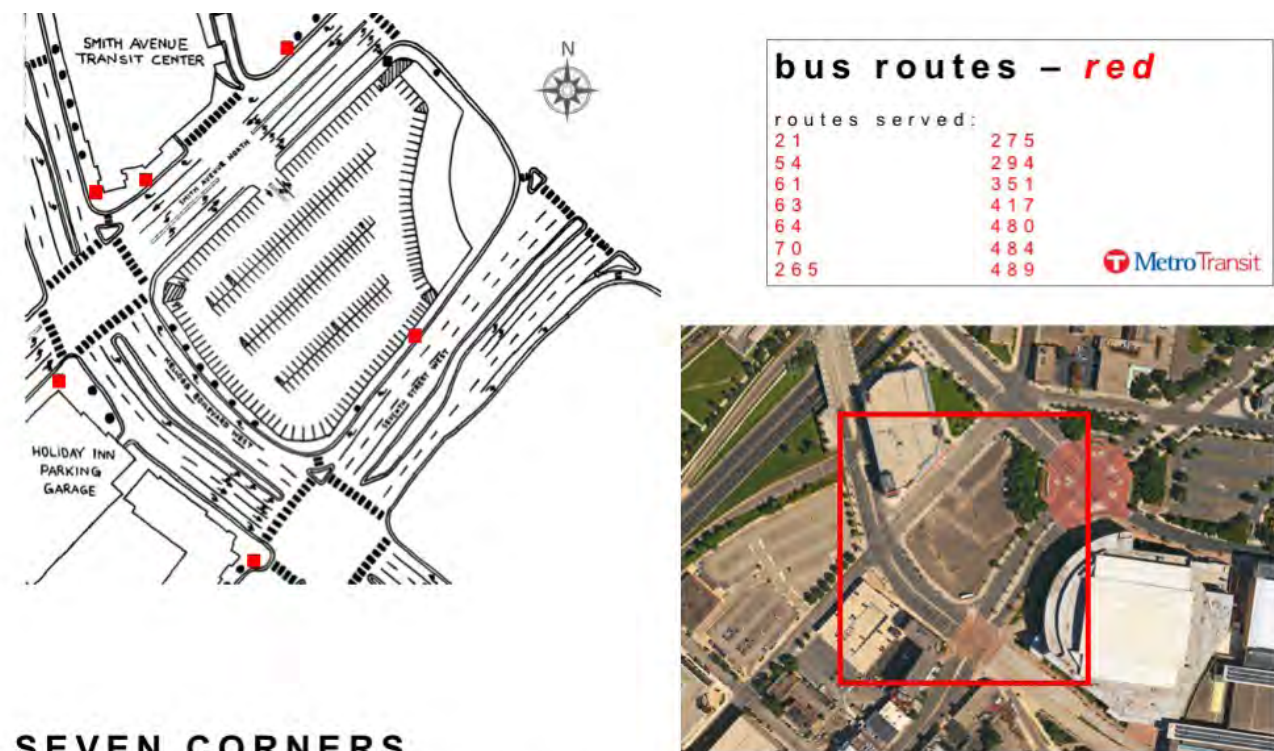
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West 7th Streetcar - Downtown St. Paul

Josh Lassen, Reid Johnson, Nate Sievert, Andrew Mercier, Caleb Rauh, Zach Cierzan

Downtown St. Paul has been an attraction for visitors and a home for residents and workers since the early settlement of the area. With the addition of a modern streetcar-line, there is an opportunity to further develop the area, while preserving and improving the qualities that make it attractive to both pedestrians, bikers, drivers, and other types of users. Our plan intends to give two options of how to smoothly integrate the streetcar into the existing streetscape, as well as how a plain parking lot could be redeveloped to better serve as a public amenity and stormwater treatment area.

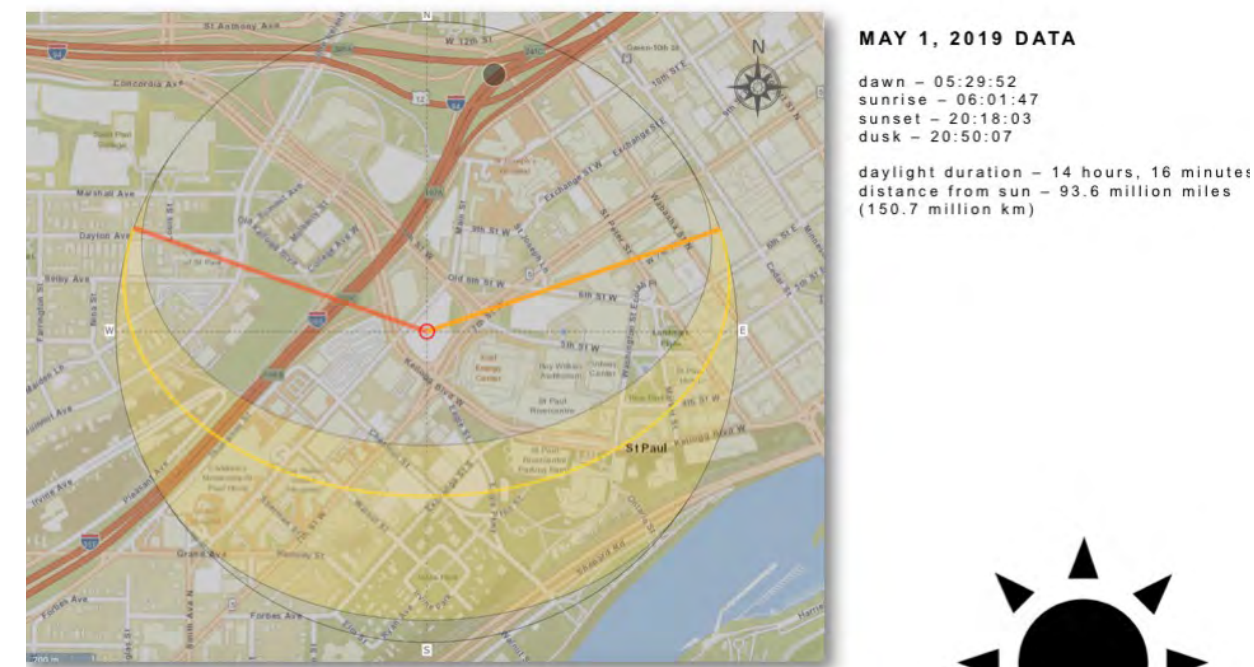




In deciding the intended use for the parking to plaza conversion we wanted to look at other public spaces in the nearby St. Paul area, with 1/4 mile radius around each space, considering how far a person might walk for lunch. The map indicated a void near our designated parking lot, and a lack of such an amenity for the hospital and West 7th near Kellogg Boulevard.



The topography map indicated our parking lot as a prime space for intercepting runoff coming from the uplands and heading for the river. Considering this we decided to make stormwater collection and treatment a major feature of the space. This will provide economic function but will also serve as an aesthetic feature and play space.



SEVEN CORNERS PARKING LOT – sunrise/sunset map



Pedestrian Flow



The existing and altered pedestrian flow maps show both the daily flow and peak event flow of traffic. The pedestrian flow on a daily basis is scattered around due to its being based the spaced out bus stops and parking lots that bring people to the area. At event release times it is a similar situation with people moving in all directions and to all intersections. Our plaza design would produce the altered pedestrian flow, which overall would concentrate people to the plaza space, allowing extra emphasis to be placed on the pedestrian infrastructure leading from the plaza. At peak event times it would concentrate the large groups of people into the plaza to wait for the streetcar, alleviating crossing traffic from all but two intersections at release times.

After several site visits and extensive research, our team came to the conclusion that there was **not necessarily one “best route”** for the streetcar. With that said, we were able to create **two prospective plans** for each potential route. One set of plans would be utilized if the streetcar was routed north to **Smith Avenue**, and the other is for if the rail were to remain on **West 7th** and continue past the northwest face of the Xcel Energy Center. **Conceptually, both plans are very similar.**

Key Features of Xcel Plaza



Union Terrace
Successful outdoor relaxation and entertainment space. Offer a snack hut and performance stage to bring people into the space with movable tables for versatile gathering.



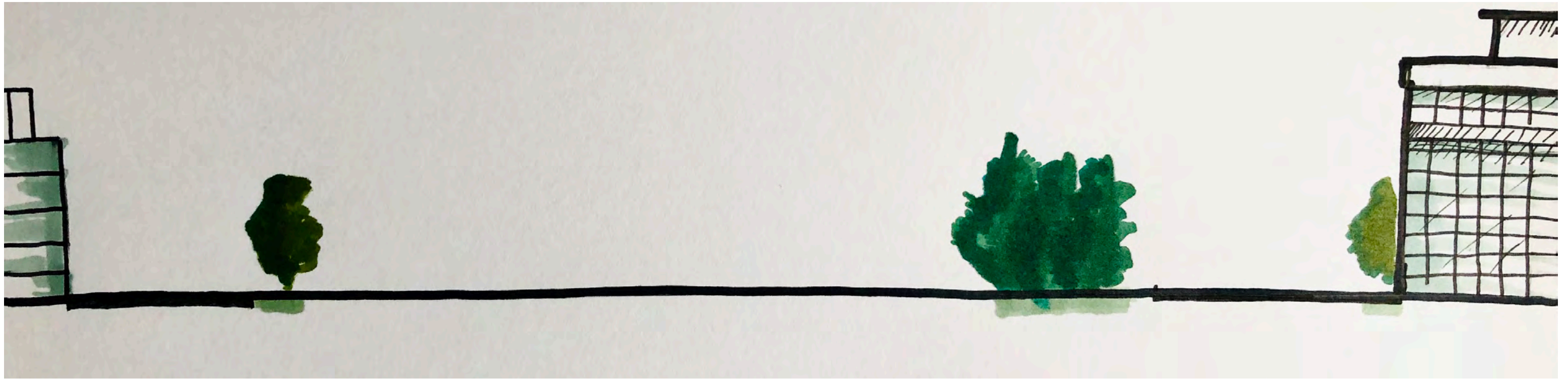
McGraw Square
Example of integrating a streetcar stop with a public plaza to create an attraction. Accommodates street vendors and unique seating makes waiting for transit more enjoyable.



Fiserv Forum
Outdoor entertainment space that provides some structural protection but can accommodate large groups of people for events. Can be warmed with small space heaters in winter months.

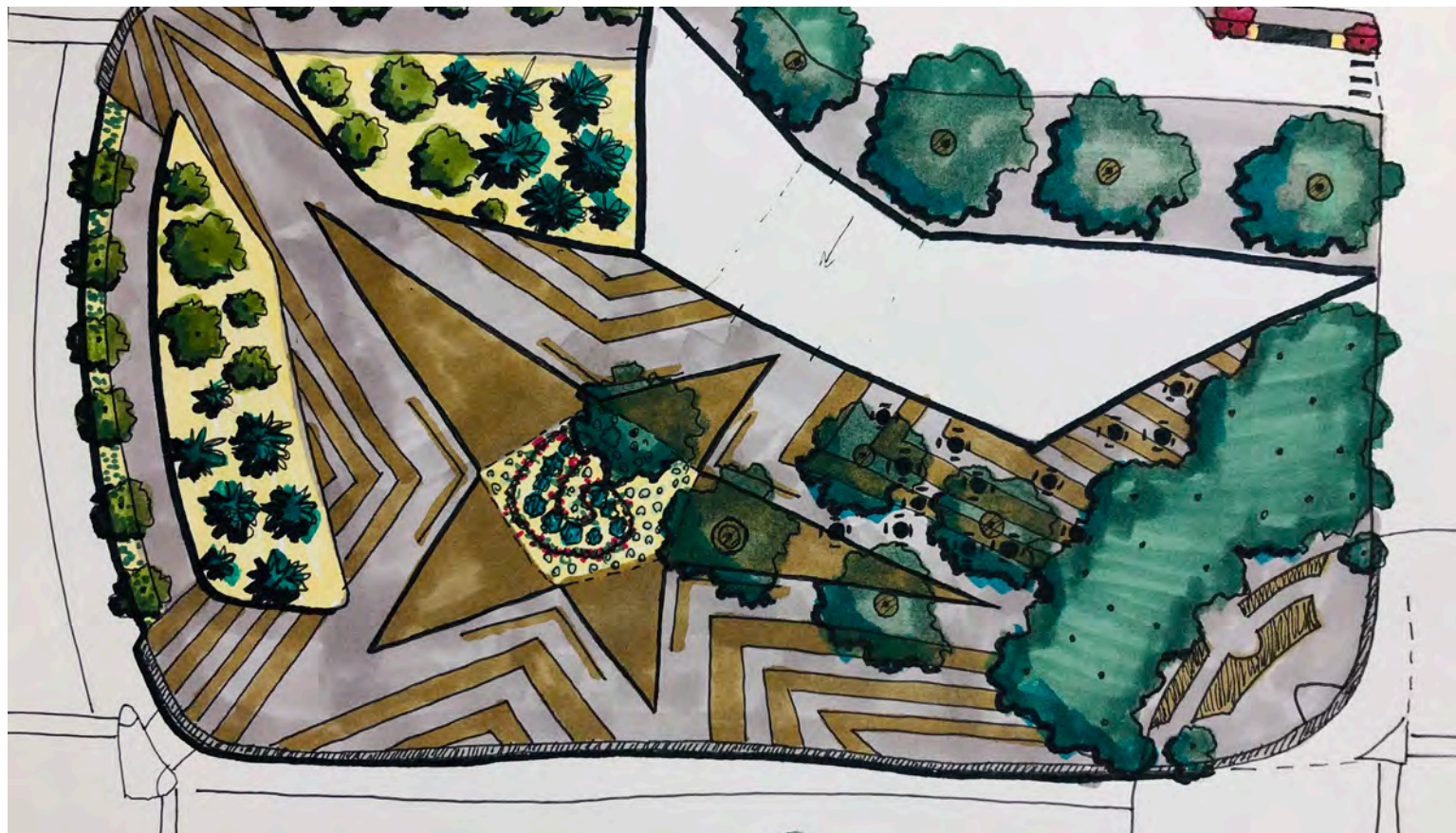


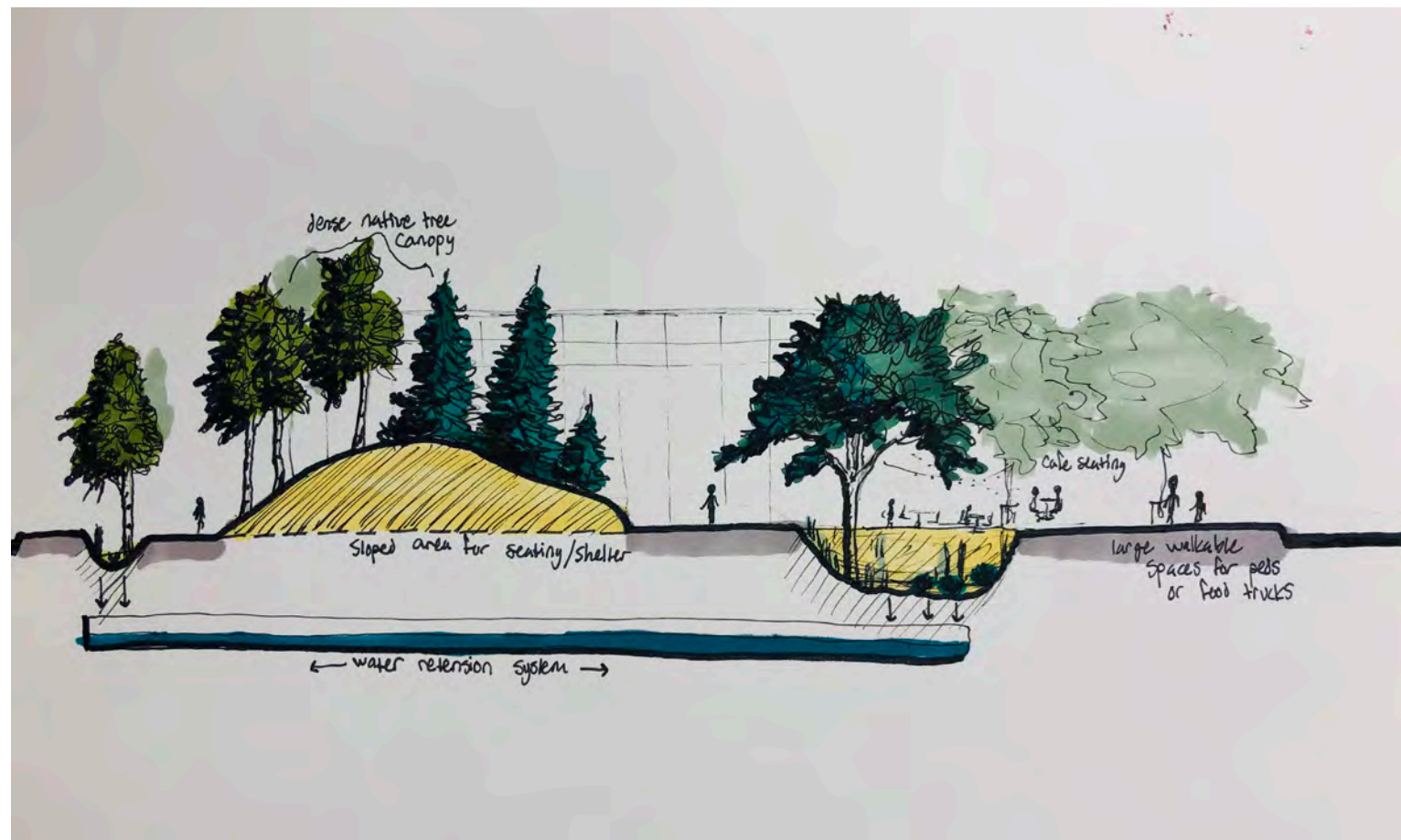
Towerside
Inspiration for rainwater collection feature in the plaza. Has the ability to hold water during rain events but allows people to enter the space when dry.



Above: Abstracted section showing the overall lack of usable space and vegetation being utilized in the lot on front of the Xcell Energy Center. Our overall hope for the project, and the reason we focused on this lot, was to bring life to this very dead space - a space that should be a focal point in the city.

Below Right and Left: Two plan designs for Smith on the Left and West 7th on the Right. Generally the same components including rain gardens, berms, a structure for keeping warm while waiting for the street car, outdoor seating, and a geometric pattern in the pavers directing pedestrian flow.





Above Left and Right: These two sections show the plan designs expanded upon from above. The sections, in a schematic way, show a clear divide of space between high and low points, vegetated areas, people interaction, and a quick diagram of the water usage below ground.



Below: This section is an abstracted representation of what the lot space would look like after implementing our design. We think this shows the vibrancy that could take place in front of the X. When compared to the first section, the contrast is stark. We aren't filling a space to fill it, rather, we are intentionally adding life.



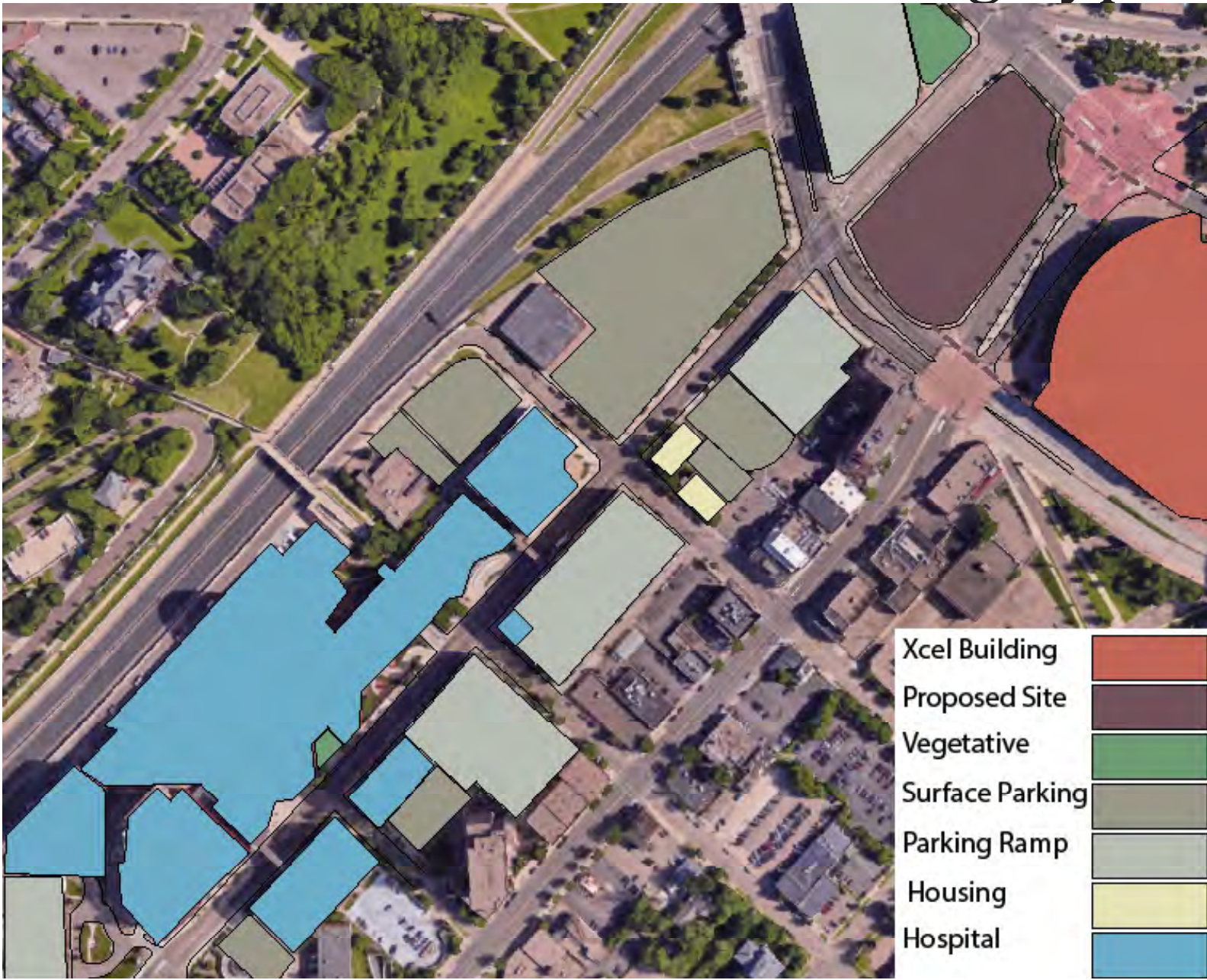
Smith Overview:

Moving the streetcar route to Smith Avenue at grand avenue up to the split of 5th and 6th streets would give the surface and ramp parking locations the opportunity to redevelop along that space. Along with that the historic aspects of West 7th along that space would not be lost; Most people in the Twin Cities think of that four block radius when they hear of “West 7th”. This way both streets will benefit with the addition of the streetcar.

Smith Avenue

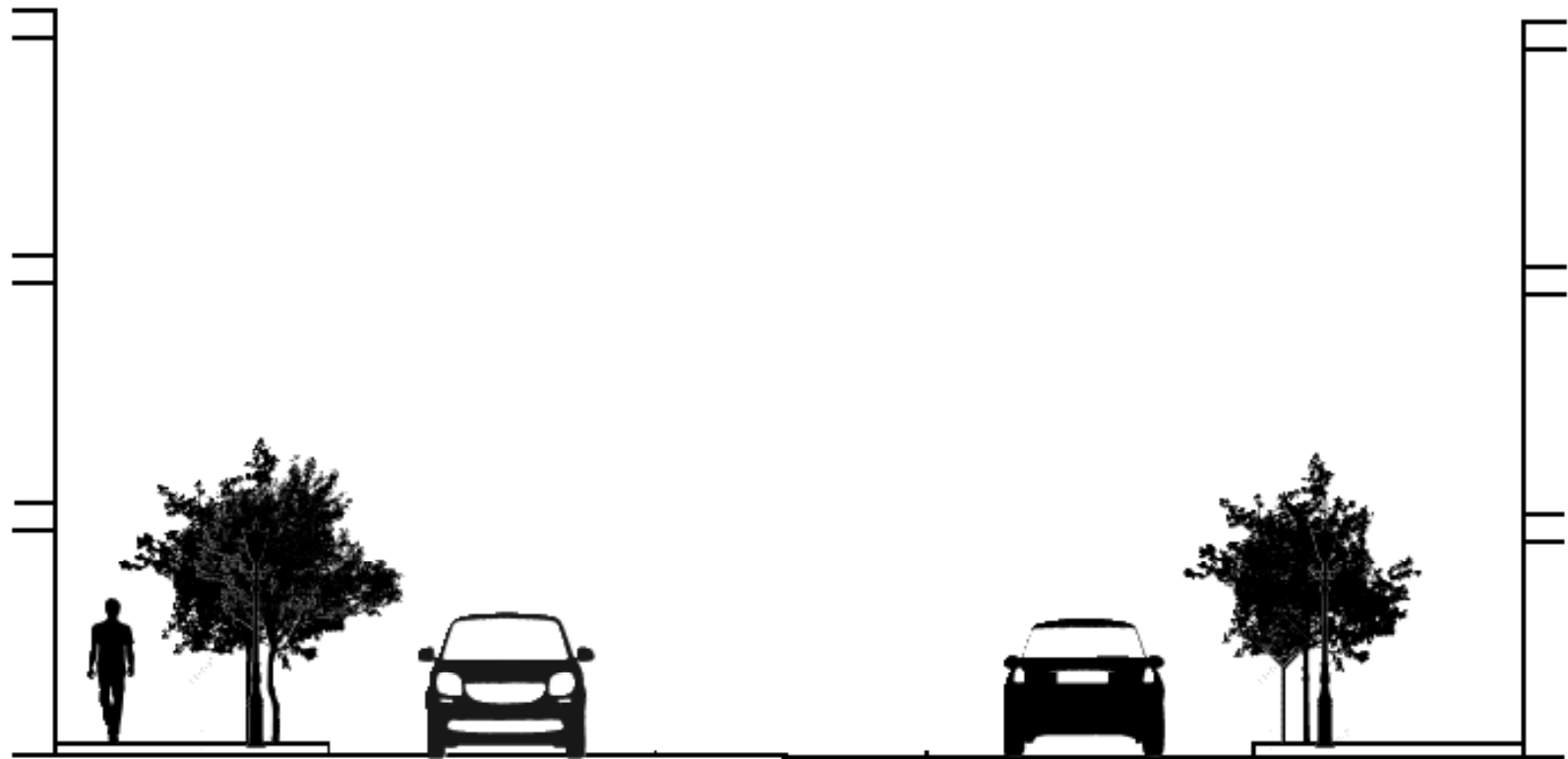
Space Type

Building Type



The building types along Smith are bland. A combination of hospital buildings and parking ramps make it up, along with two apartment buildings, so there is a lot of room for redevelopment, especially with the the parking. Almost half of the parking lots are not even filled regularly, so theoretically, a bunch of them can go. The proposed redevelopment plaza space in front of the Xcel as is shown later is an example of what many of these parking lots can become. Also, there is little vegetation, and even less seating on Smith Avenue. If the streetcar was brought through there the street could then be redeveloped as well.



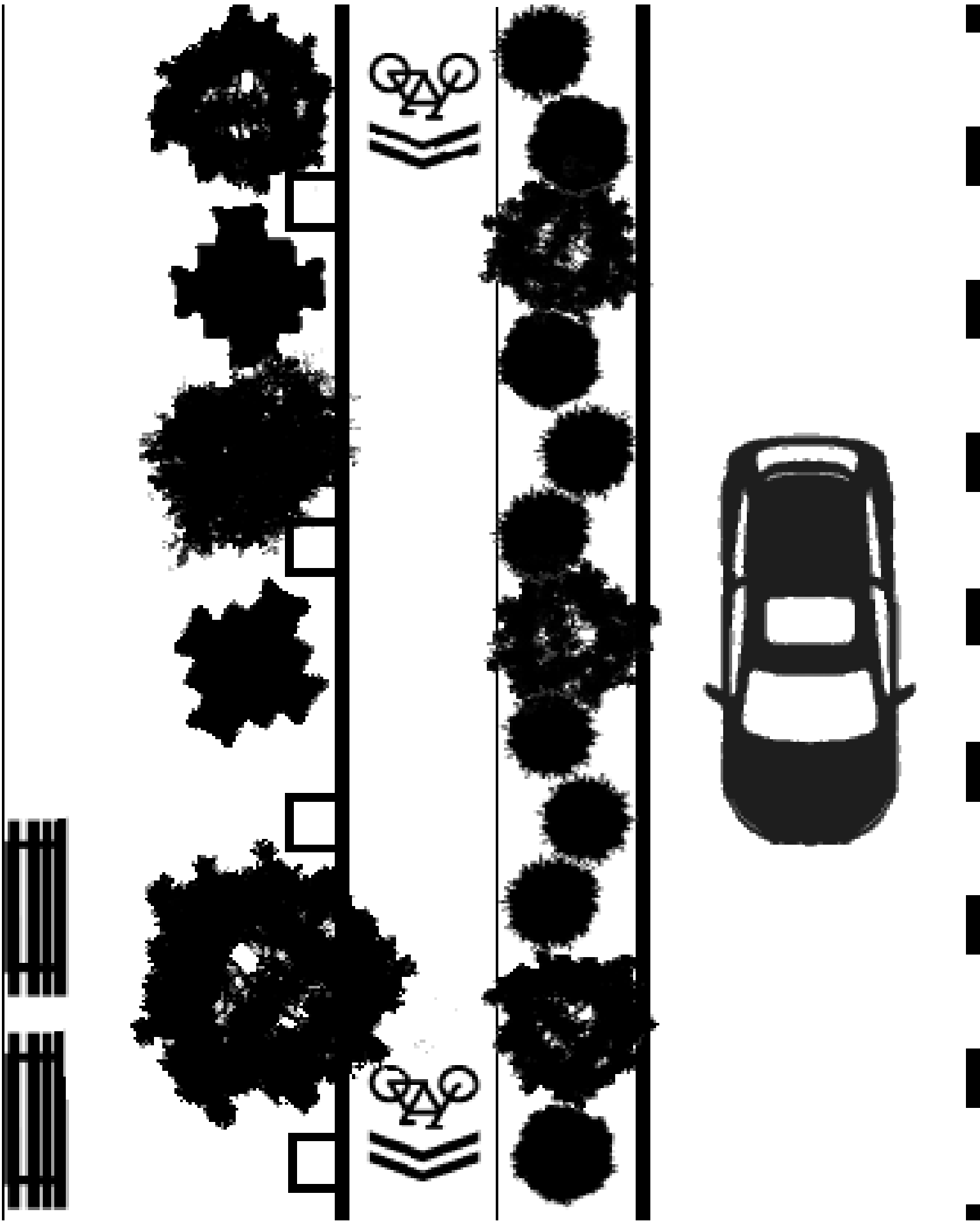


Currently Smith has little development along the four block radius from Grand avenue up through Kellogg Boulevard. There is an unneeded turn lane through most of that stretch, and there is nothing outside that brings much attention for people to be there. The only people that use the sidewalk space are people moving from parking lots to the hospitals where they work or are receiving care.



Taking out the middle turn lane along the stretch of Smith allows for more sidewalk space as well as the addition of a bioswale. The turn lane is rarely used, and when cars do turn it will not be detrimental to traffic flow. The addition of dense vegetation with a biofiltration system would improve the flow of pedestrian traffic, and the streetcar will as well. There will be room for plentiful seating too.

Proposed Plan View



Proposed Vegetation

Looking at the specific plantings that could be placed along the sidewalk, or in the bioswales, plants that thrive in wet conditions without full sun was ideal. Along with that looking at colors and species that mixed well together while keeping color in the space at all times of the year. This was especially important because half of the time in Minnesota the Deciduous plants lose their leaves.



Winterberry
-Both
-Flood Tolerant
-Winter Color



Serviceberry
-Sidewalk
-Water Tolerant



Sugar Maple
-Sidewalk
-Water Tolerant



Paper Birch
-Sidewalk
-Water Tolerant



Nannyberry Viburnum
-Bioswale
-Water Tolerant



Red Dogwood
-Bioswale
-Flood Tolerant
-Winter Color



Annabelle Hydrangea
-Bioswale
-Flood Tolerant



Karl Forester
-Both
-Partial Shade



(Yellow) Iris
- Bioswale
-Water Tolerant



(Yellow) Daylily
-Bioswale
-Water Tolerant

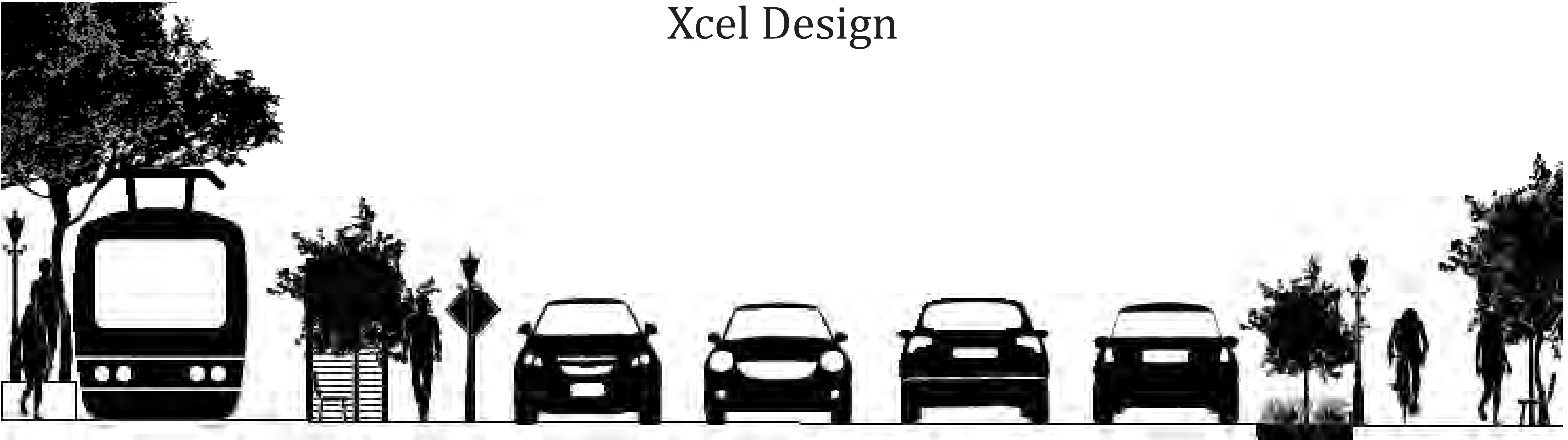


Sedum (Goldmoss)
-Bioswale
-Water Tolerant



Arctic Willow
-Bioswale
Water Tolerant

Xcel Design



Specifically at the point around the Xcel, the streetcar could be brought into the proposed plaza site if the Smith alternative is what is ultimately decided on. With that, the area around Cleveland Circle and the Xcel Energy Center wouldn't have its car traffic obstructed by the streetcar. Along with that, the plan would be to keep the current bus stop along the northeast corner of the proposed site kept in place with the addition of some vegetation. The streetcar would come in between the corner of the bus stop and the plaza site as seen above.

West 7th Option



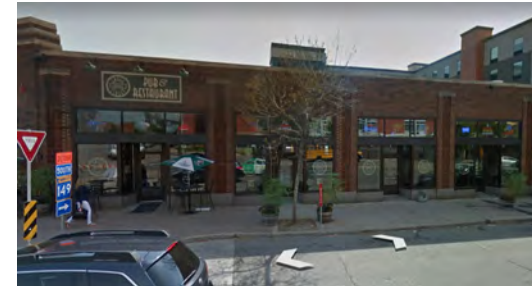
1
Type: Hard (due to reflectivity)
Interactive: No
Unit size: Massive
Stories: 7+



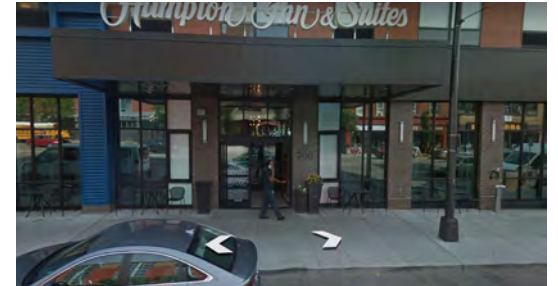
2
Type: Hard
Interactive: No
Unit size: Large
Stories: 7+



3
Type: Soft
Interactive: No
Unit size: Small and medium
Stories: 1



4
Type: Soft
Interactive: No
Unit size: Medium
Stories: 5



5
Type: Somewhat soft
Interactive: Seating and Table
Unit size: Large
Stories: 1, 6



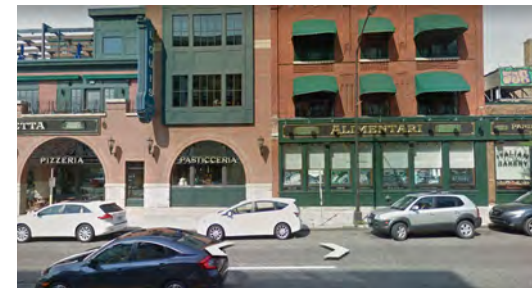
6
Type: Soft
Interactive: No
Unit size: Small
Stories: 2



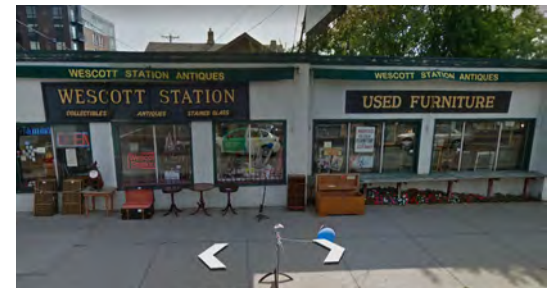
7
Type: Soft
Interactive: No
Unit size: Medium
Stories: 2



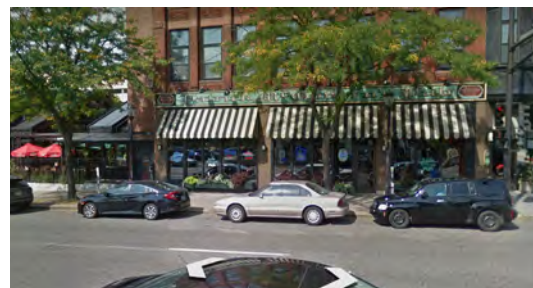
8
Type: Mostly hard
Interactive: Overhang and seating
Unit size: Large
Stories: 3



9
Type: Soft
Interactive: No
Unit size: Medium
Stories: 1



10
Type: Soft
Interactive: Seating
Unit size: Medium to large
Stories: 3



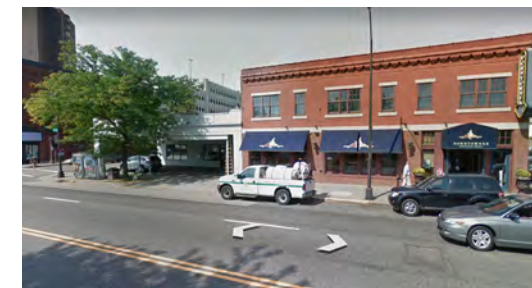
11
Type: Mix of soft and hard
Interactive: No
Unit size: Small
Stories: 1



12
Type: Soft
Interactive: Seating
Unit size: Medium
Stories: 1



13
Type: Somewhat soft
Interactive: Overhang drive
Unit size: Medium to large
Stories: 2



14
Type: Soft
Interactive: No
Unit size: Medium
Stories: 1



Why does the West 7th route have more potential?



West 7th

- 1 No setbacks
 - 2 Narrow units
 - 3 Soft facades
 - 4 Diverse facades
- Lots of stimulants
Diverse program

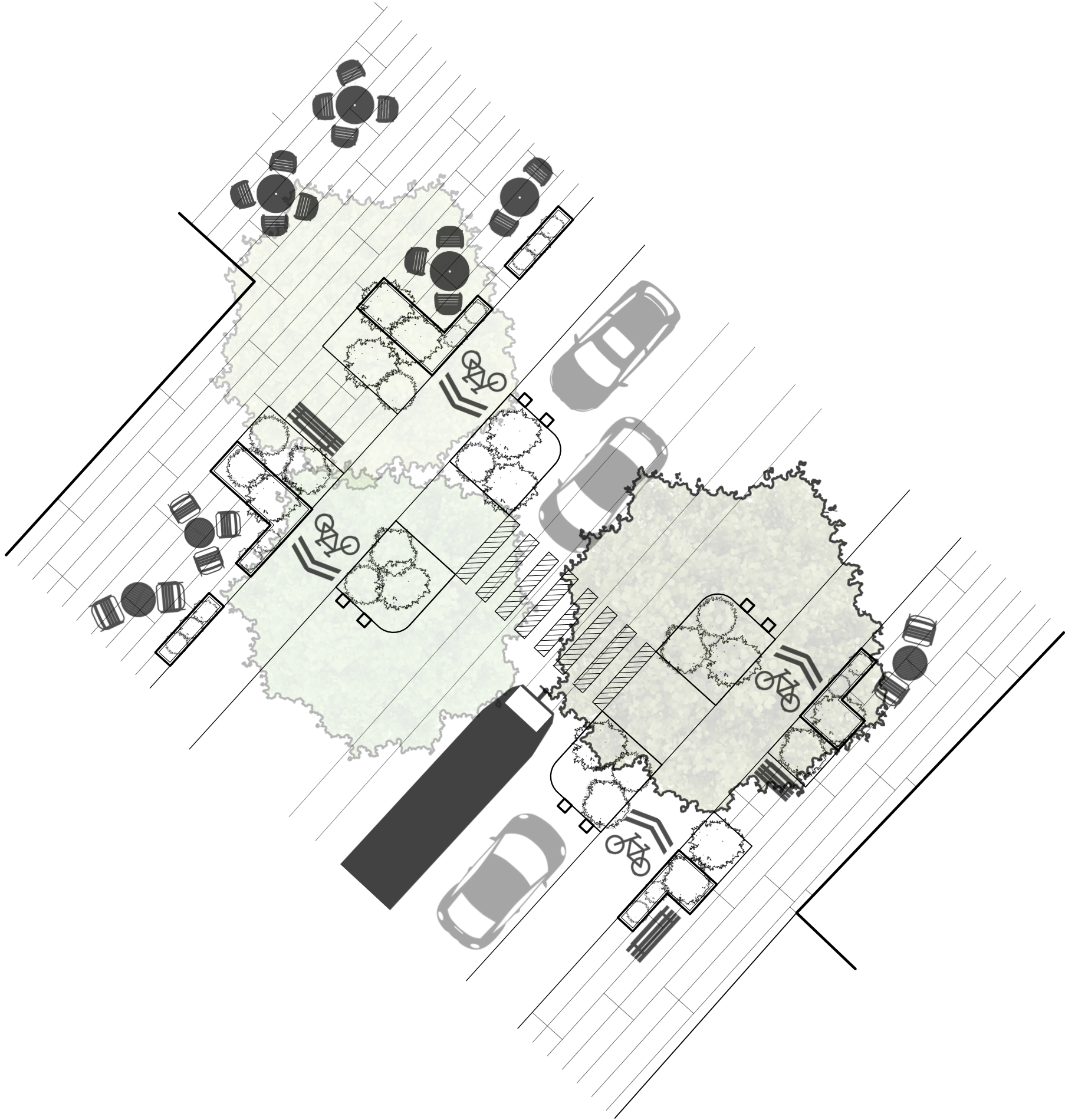


Smith Ave.

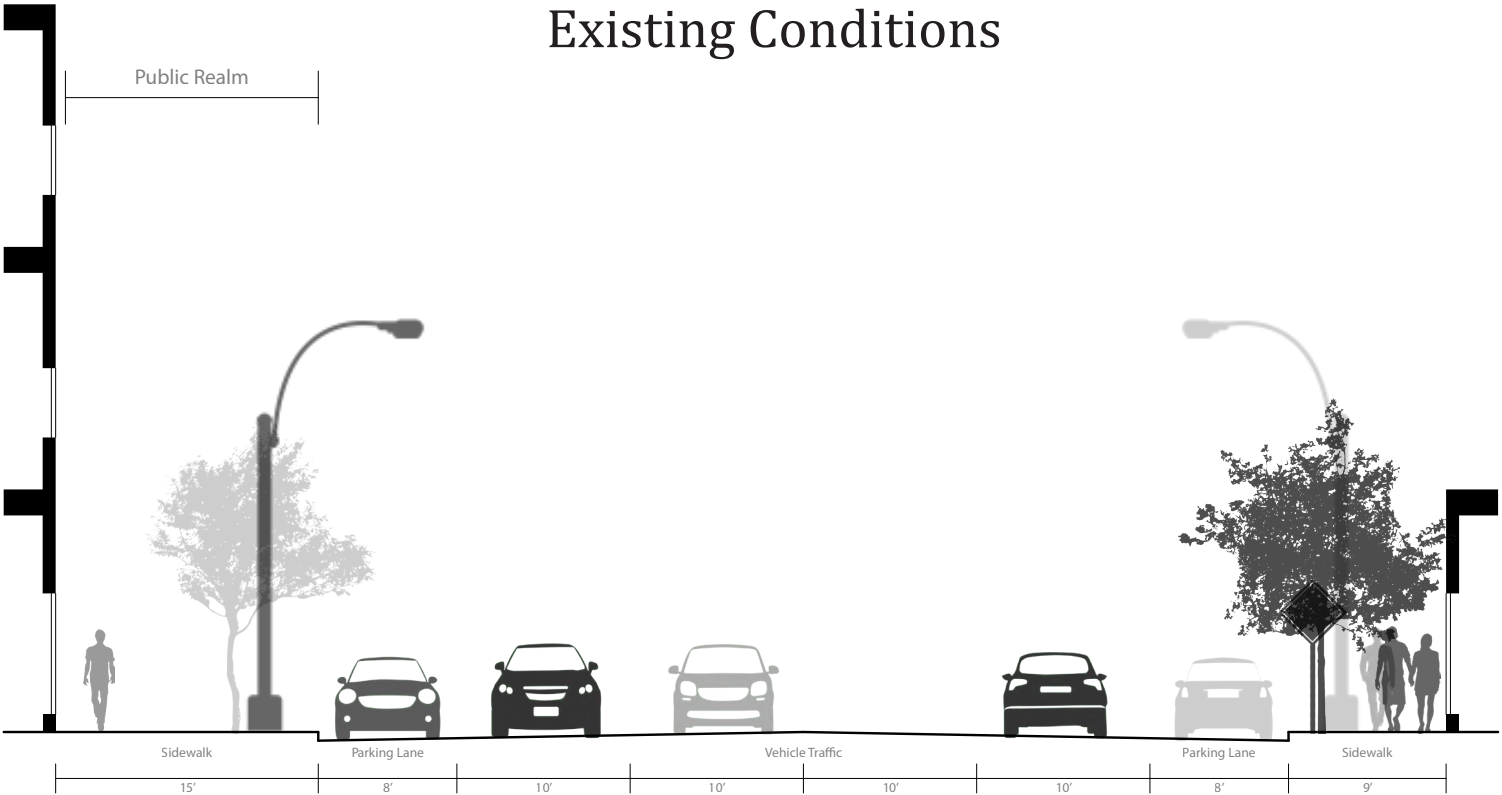
- 1 some setbacks
 - 2 Large/ wide units
 - 3 Soft and hard facades
 - 4 Monochromatic facades
- Minimum stimulants
Mostly medical and parking facilities

Design Proposal



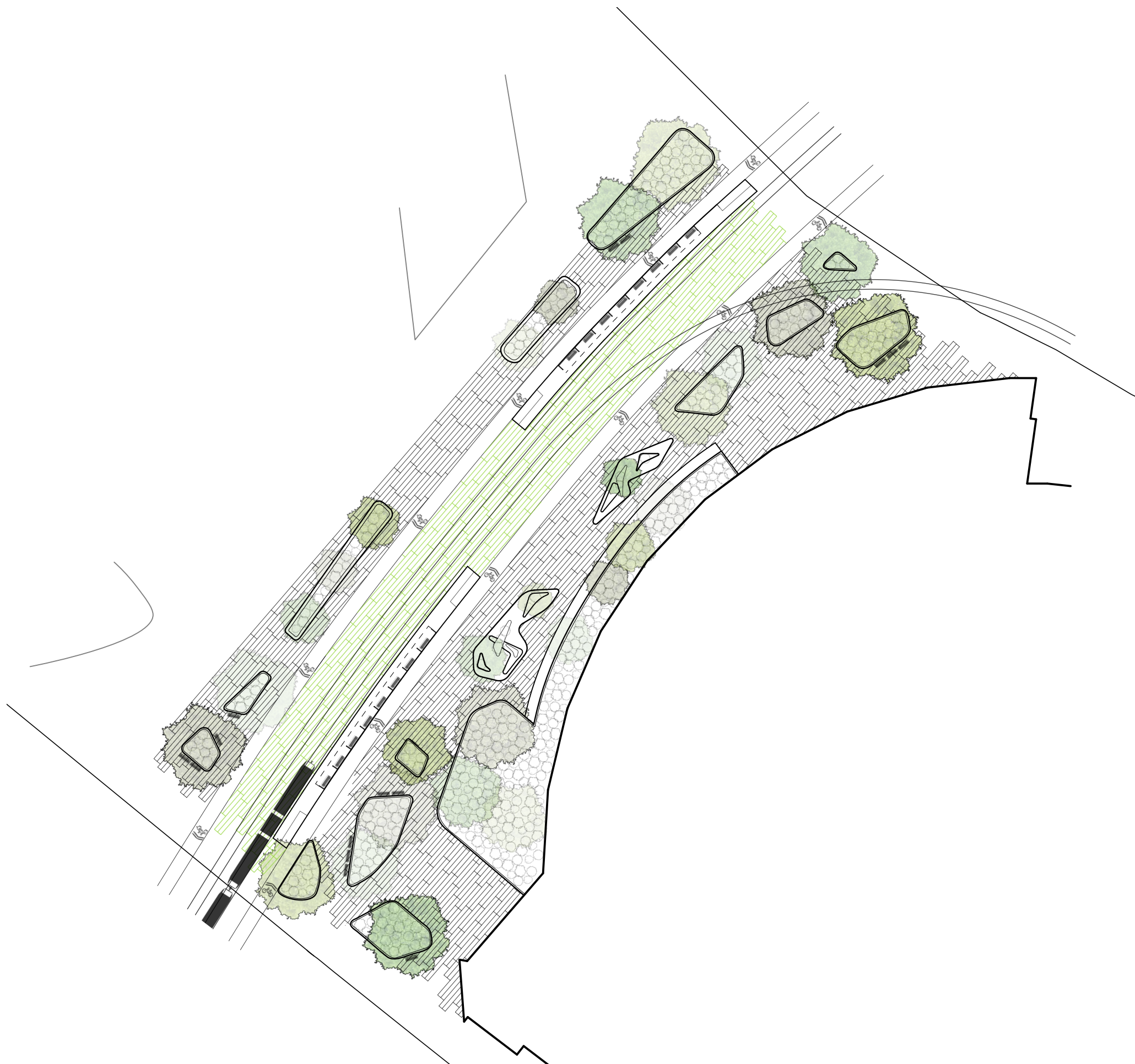


Existing Conditions

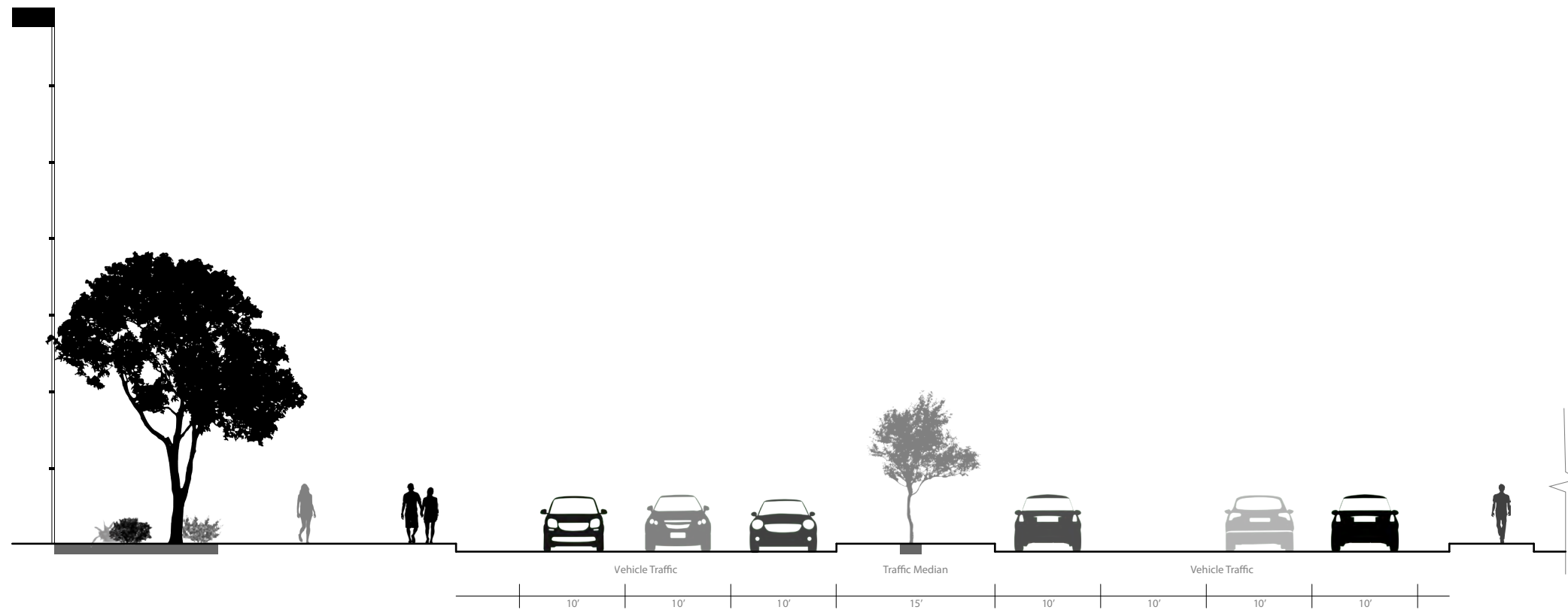


Proposed Design





Existing Conditions



Proposed Design

